

# Water Quality Monitoring Report First 2022 Semi-Annual Event

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## Trail Ridge Landfill

Trail Ridge Landfill, Inc.



May 5, 2022

**PREPARED FOR:**



Trail Ridge Landfill, Inc.  
5110 US Highway 301  
Baldwin, FL 32234

**PREPARED BY:**



Carlson Environmental Consultants  
305 South Main Street  
Monroe, North Carolina 28112

**STATEMENT OF GEOLOGIC REVIEW**

In general accordance with Chapter 62-701, Florida Administrative Code (F.A.C.), Solid Waste Management Facilities, this Groundwater Monitoring Report – Semi-Annual Monitoring Event – February 2022 for the Trail Ridge Landfill, located in Baldwin, Florida, has been reviewed, signed and sealed by a registered Professional Geologist in the State of Florida, and is consistent with standard principles related to groundwater monitoring

  
\_\_\_\_\_  
Ken E. Guilbeault, P.G.  
Florida License # 2907





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# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

DEP Form # 62-701.900(31), F.A.C.  
Form Title: Water Quality Monitoring Certification  
Effective Date: January 6, 2010  
Incorporated in Rule 62-701.510(9), F.A.C.

## WATER QUALITY MONITORING CERTIFICATION

### PART I GENERAL INFORMATION

(1) Facility Name Trailridge Landfill, Inc.  
 Address 5110 U.S. Highway 301  
 City Baldwin, FL Zip 32234 County Duval  
 Telephone Number ( ) \_\_\_\_\_

(2) WACS Facility ID 33628

(3) DEP Permit Number 0013495-025-SO-01

(4) Authorized Representative's Name Eric Parker Title Environmental Manager  
 Address 5110 U.S. Highway 301  
 City Baldwin, FL Zip 32234 County Duval  
 Telephone Number (904 ) 748-6006  
 Email address (if available) eparker1@wm.com

### CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

5/5/22 (Date) Eric Parker (Owner or Authorized Representative's Signature)

### PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Atlantic Coast Consulting, Inc. (F.K.A., 920045 - ProTech)  
 Analytical Lab NELAC / HRS Certification # Florida E87052  
 Lab Name Advanced Environmental Laboratories, Inc. (AEL)  
 Address 6681 Southpoint Parkway, Jacksonville, FL 32216  
 Phone Number (904 ) 363-9350  
 Email address (if available) jallen@aellab.com

Northwest District  
160 Government Center  
Pensacola, FL 32501-5794  
850-595-8360

Northeast District  
7825 Baymeadows Way, Ste. 200 B  
Jacksonville, FL 32256-7590  
904-807-3300

Central District  
3319 Maguire Blvd, Ste. 232  
Orlando, FL 32803-3767  
407-894-7555

Southwest District  
13051 N. Telecom Pkwy  
Temple Terrace, FL  
813-632-7111

South District  
2295 Victoria Ave., Ste. 364  
Fort Myers, FL 33902-2549  
239-332-6975

Southeast District  
400 North Congress Ave  
West Palm Beach, FL 33401  
561-681-6600

## 1 INTRODUCTION

The Trail Ridge Landfill (Site) is owned by the City of Jacksonville and operated by Trail Ridge Landfill, Inc. (a Waste Management Company) in accordance with Florida Department of Environmental Protection (FDEP) Operation Permit Number 0013493-025-SO-01 issued June 16, 2014 and minor mods through 0013493-031-SO-MM issued January 28, 2021. The Permit expires on June 16, 2034. The Site is an active municipal solid waste landfill that serves the City of Jacksonville, Duval County, and Northeast Florida.

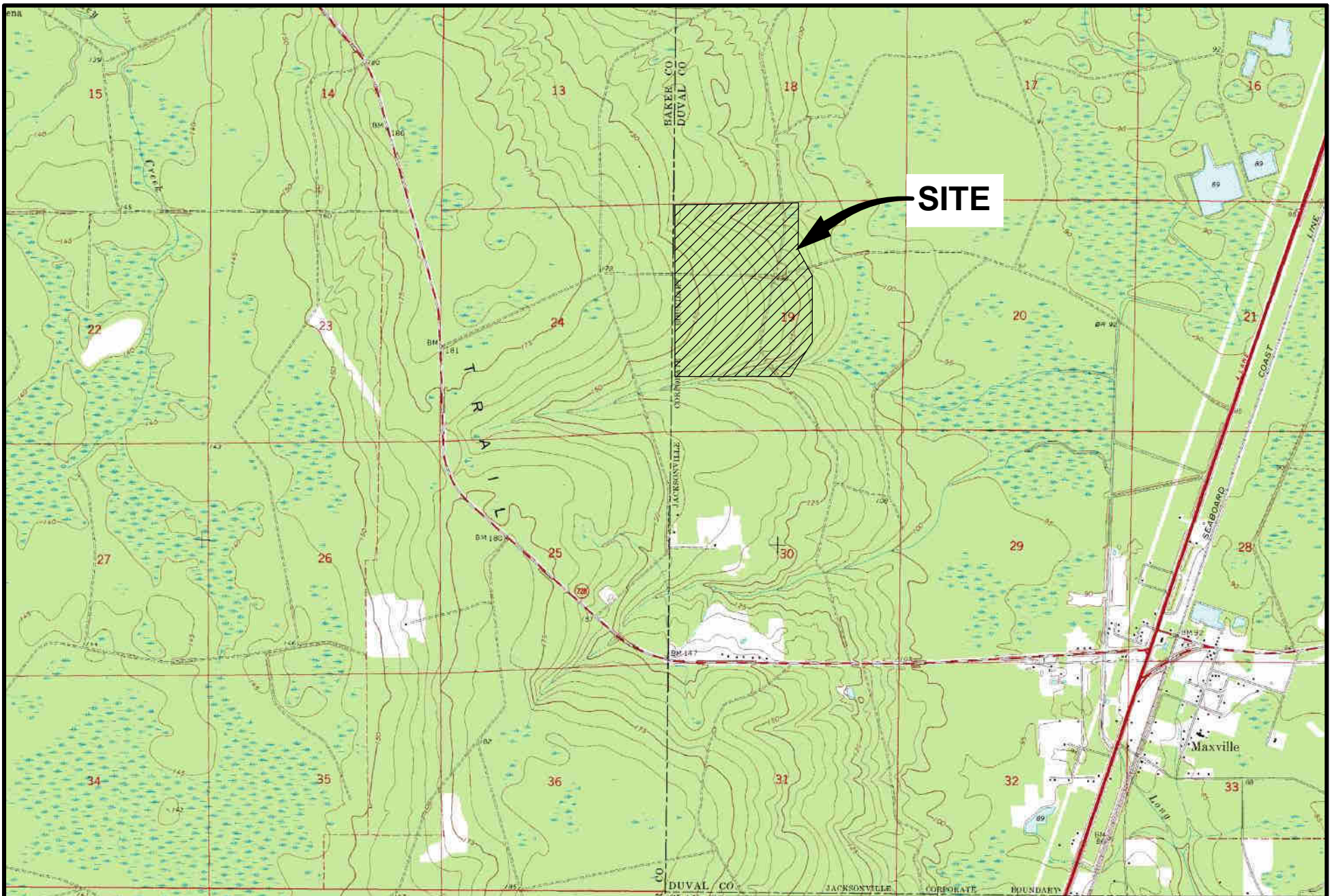
Carlson Environmental Consultants, PC (CEC) has been retained to report the results of semi-annual groundwater and surface water monitoring at the Site in accordance with the Water Quality Monitoring Plan (Appendix 3) of the referenced permit.

This report presents the methods and findings of the first 2022 semi-annual groundwater monitoring event conducted on February 18, 21, and 22, 2022 and a limited resampling event on March 24, 2022 (Appendix A). An electronic data deliverable (EDD) of the results in "ADaPT format" is attached as Appendix B. This EDD has been verified as uploadable into the latest version of ADaPT.

The following sections include general information concerning the Site history and setting, an evaluation of surficial aquifer groundwater flow, and groundwater and surface water quality conditions at the Site. Laboratory analytical data are summarized, evaluated, and compared to historical data where appropriate.

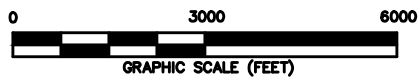
### 1.1 Site Location and Description

The Site is located near the town of Baldwin approximately five miles southwest of the intersection of US-301 and I-10 in southwestern Duval County along the border with Baker County, Florida (Figure 1). The Facility is an active municipal solid waste landfill with a total disposal area of approximately 427 acres that accepts waste from the City of Jacksonville and Duval County. The Facility operates a waste tire processing facility and active gas collection system, and the Facility design includes wetland mitigation, a stormwater management system, and environmental monitoring systems for groundwater, surface water, and methane gas (Figure 2). As of this report, waste has been placed in Phases 1-6 only. The stormwater management system for Phases 6-14 has been completed, although vegetation is still filling in for this area.



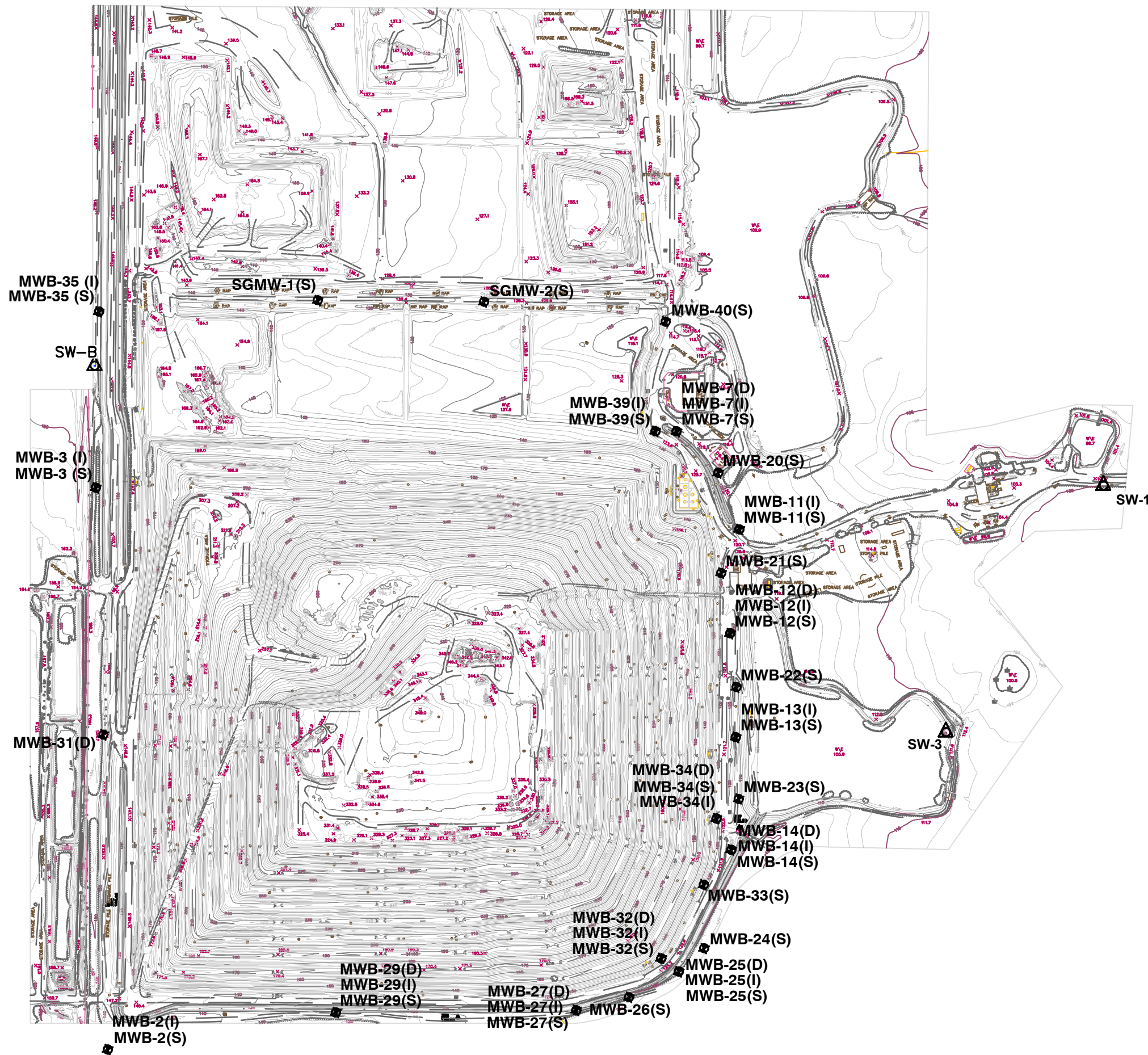
NOTES:

1. BACKGROUND IMAGE FROM USGS 7.5 MINUTE QUADRANGLE;  
 MAXVILLE, FL 1970 (PHOTOINSPECTED 1984.)



CEC

FIGURE 1:  
 SITE LOCATION  
 TRAIL RIDGE LANDFILL  
 JACKSONVILLE, FL

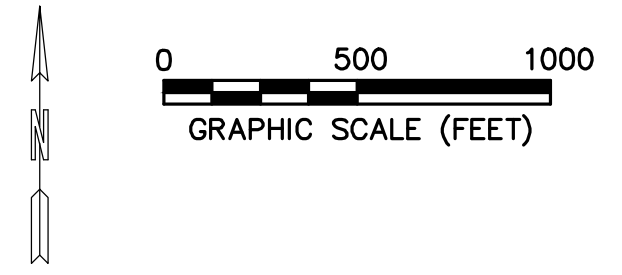


**LEGEND**

- 2' CONTOURS
- 10' CONTOURS
- ◆ MWB-3 GROUNDWATER MONITORING WELL
  - (S) SHALLOW LEVEL WELL
  - (I) INTERMEDIATE LEVEL WELL
  - (D) DEEP LEVEL WELL
- ▲ SW-B SURFACE WATER SAMPLING POINT

**NOTES:**

1. THE TOPOGRAPHIC MAP WAS PREPARED BY SOUTHERN RESOURCES MAPPING COOPERATION FROM A PHOTOGRAPHIC FLY OVER COMPLETED JANUARY 25, 2017 AND WAS COMPILED IN FEBRUARY 2017.



**CEC**

**FIGURE 2:  
SITE LAYOUT AND SAMPLING LOCATIONS  
TRAIL RIDGE LANDFILL  
JACKSONVILLE, FL**

## **2 MONITORING PROGRAM**

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Groundwater and surface water monitoring events are conducted concurrently on a semi-annual basis prior to March 30<sup>th</sup> and September 30<sup>th</sup> of each year. Figure 2 shows the Site layout and groundwater monitoring well and surface water sampling locations. Semi-annual reporting of the results of groundwater and surface water sampling is performed in accordance with the Site's solid waste permit, water quality monitoring plan, and rule 62-701.510 (8)(a).

### **2.1 Groundwater Monitoring Program**

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The current Site groundwater monitoring system consists of twenty-nine (29) groundwater monitoring wells screened at shallow (S) and intermediate (I) depths within the uppermost, surficial aquifer. Additionally, there are eighteen (18) piezometers screened at the shallow (S), intermediate (I), and deep (D) depths within the uppermost surficial aquifer used for monitoring groundwater levels at the site. The background and compliance wells are listed in Table 1. Table 2 lists the construction detail summary for the monitoring wells and piezometers comprising the monitoring system.



Table 1 Active Surficial Aquifer Monitoring Wells  
at the Trail Ridge Landfill

| <b>Upper Surficial<br/>Aquifer Zone</b>      | <b>Intermediate Surficial<br/>Aquifer Zone</b> | <b>Deep Surficial<br/>Aquifer Zone</b> |
|--|--|--|
| <b>Background Monitoring Wells</b>           |  |  |
| MWB-2S                                       | MWB-2I   |  |
| MWB-3S                                       | MWB-3I   |  |
| <b>Compliance/Detection Monitoring Wells</b> |  |  |
| MWB-11S                                      | MWB-11IR                                       |  |
| MWB-12S                                      | MWB-12I  |  |
| MWB-13S                                      | MWB-13I  |  |
| MWB-20S                                      |  |  |
| MWB-21S                                      |  |  |
| MWB-22S                                      |  |  |
| MWB-27S                                      | MWB-27I  |  |
| MWB-29S                                      | MWB-29I  |  |
| MWB-32S                                      | MWB-32I  |  |
| MWB-33S                                      |  |  |
| MWB-34S                                      | MWB-34I  |  |
| MWB-35S                                      | MWB-35I  |  |
| MWB-39S                                      | MWB-39I  |  |
| MWB-40S                                      |  |  |
| SGMW-1SR                                     |  |  |
| SGMW-2S                                      |  |  |
| <b>Piezometers (Water Level Only)</b>        |  |  |
| MWB-7S                                       | MWB-7I   | MWB-7D                                 |
|  |  | MWB-12D                                |
| MWB-14S                                      | MWB-14I  | MWB-14D                                |
| MWB-23S                                      |  |  |
| MWB-24S                                      |  |  |
| MWB-25S                                      | MWB-25I  | MWB-25I                                |
| MWB-26S                                      |  |  |
|  |  | MWB-27D                                |
|  |  | MWB-29D                                |
|  |  | MWB-31D                                |
|  |  | MWB-32D                                |
|  |  | MWB-34D                                |

Notes:

1. Wells listed on a single row of the table are located in a single cluster of wells.

**Table 2 - Existing Monitoring Well Details  
Trail Ridge Landfill, Jacksonville, FL**

| Well ID    | Well Designation <sup>1</sup> | Monitored Phase <sup>1</sup> | Approximate State Plane Coordinates (ft) <sup>1</sup> |              | Well Diameter <sup>1</sup> | Total Well Depth <sup>1</sup> | Top of Casing Elevation (ft TOC) <sup>2</sup> | Well Screen Interval <sup>3</sup> |
|------------|-------------------------------|------------------------------|---|--------------|----------------------------|-------------------------------|---|-----------------------------------|
|            |                               |                              | Easting (X)   | Northing (Y) |                            |                               |   |                                   |
| MWB-2(S)   | Background                    | Phases 3/4/5                 | 324,826   | 2,141,385    | 2                          | 17.5                          | 146.64  | 5.04-20.4                         |
| MWB-3(S)   | Background                    | Phases 1/2                   | 324,772   | 2,143,945    | 2                          | 18                            | 154.38  | 5.54-20.54                        |
| MWB-7(S)   | Water Levels Only             |                              | 327,418   | 2,144,201    | 2                          | 16.5                          | 123.29  | 4.19-19.19                        |
| MWB-11(S)  | Compliance                    | Phase I                      | 327,704   | 2,143,755    | 2                          | 18                            | 120.81  | 5.31-20.31                        |
| MWB-12(S)  | Compliance                    | Phase I                      | 327,662   | 2,143,281    | 2                          | 25                            | 124.63  | 11.73-26.73                       |
| MWB-13(S)  | Compliance                    | Phase 3/4                    | 327,688   | 2,142,808    | 2                          | 24.6                          | 126.05  | 11.56-26.56                       |
| MWB-14(S)  | Water Levels Only             |                              | 327,667   | 2,142,295    | 2                          | 16.5                          | 126.05  | 4.15-19.15                        |
| MWB-20(S)  | Compliance                    | Phase I                      | 327,608   | 2,144,012    | 2                          | 18                            | 121.01  | 5.11-20.11                        |
| MWB-21(S)  | Compliance                    | Phase I                      | 327,621   | 2,143,556    | 2                          | 18                            | 122.84  | 4.84-19.84                        |
| MWB-22(S)  | Compliance                    | Phase I                      | 327,690   | 2,143,036    | 2                          | 25                            | 126.97  | 12.47-27.47                       |
| MWB-23(S)  | Water Levels Only             |                              | 327,701   | 2,142,527    | 2                          | 25                            | 125.34  | 12.84-27.84                       |
| MWB-24(S)  | Water Levels Only             |                              | 327,543   | 2,141,846    | 2                          | 16.5                          | 126.04  | 5.34-20.34                        |
| MWB-25(S)  | Water Levels Only             |                              | 327,428   | 2,141,740    | 2                          | 17.2                          | 125.22  | 5.32-20.32                        |
| MWB-26(S)  | Water Levels Only             |                              | 327,201   | 2,141,623    | 2                          | 16.5                          | 126.55  | 3.65-18.65                        |
| MWB-27(S)  | Compliance                    | Phase 5                      | 326,960   | 2,141,564    | 2                          | 16.3                          | 128.42  | 3.32-18.32                        |
| MWB-29(S)  | Compliance                    | Phase 5                      | 325,866   | 2,141,554    | 2                          | 16.5                          | 138.02  | 4.02-19.02                        |
| MWB-32(S)  | Detection                     | Phase 5                      | 327,348   | 2,141,801    | 2                          | 22.0                          | 124.64  | 14.90 to 19.90                    |
| MWB-33(S)  | Detection                     | Phase 3/4                    | 327,541   | 2,142,136    | 2                          | 22.3                          | 125.90  | 10.30 to 20.30                    |
| MWB-34(S)  | Detection                     | Phase 3/4                    | 327,599   | 2,142,438    | 2                          | 20.0                          | 125.78  | 13.36 to 18.36                    |
| MWB-35(S)  | Background                    | Phases 6/7                   | 324,786   | 2,144,747    | 2                          | 15                            | 147.79  | 10.00 to 15.00                    |
| MWB-39(S)  | Detection                     | Phase 6                      | 327,321   | 2,144,202    | 2                          | 21                            | 126.85  | 11.00 to 21.00                    |
| MWB-40(S)  | Detection                     | Phase 6                      | 327,367   | 2,144,702    | 2                          | 21                            | 115.41  | 11.00 to 21.00                    |
| SGMW-1(S)R | Temp. Detection               | Phase 6                      | 325,783   | 2,144,798    | 2                          | 15                            | 140.30  | 5.00 to 15.00                     |
| SGMW-2(S)  | Temp. Detection               | Phase 6                      | 326,540   | 2,144,792    | 2                          | 15                            | 130.55  | 5.00 to 15.00                     |
| MWB-2(I)   | Background                    | Phases 3/4/5                 | 324,812   | 2,141,383    | 2                          | 59.8                          | 145.73  | 56.19-61.69                       |
| MWB-3(I)   | Background                    | Phases 1/2                   | 324,788   | 2,143,973    | 2                          | 60                            | 151.86  | 55.56-60.86                       |
| MWB-7(I)   | Water Levels Only             |                              | 327,425   | 2,144,196    | 2                          | 63.3                          | 121.53  | 59.82-65.12                       |
| MWB-11(I)  | Compliance                    | Phase I                      | 327,687   | 2,143,758    | 2                          | 60                            | 120.43  | 56.4-61.9                         |
| MWB-12(I)  | Compliance                    | Phase I                      | 327,664   | 2,143,273    | 2                          | 69.6                          | 124.62  | 65.92-71.42                       |
| MWB-13(I)  | Compliance                    | Phase 3/4                    | 327,687   | 2,142,802    | 2                          | 58.6                          | 125.98  | 55.48-60.48                       |
| MWB-14(I)  | Water Levels Only             |                              | 327,668   | 2,142,306    | 2                          | 60                            | 125.92  | 57.52-62.52                       |
| MWB-25(I)  | Water Levels Only             |                              | 327,442   | 2,141,746    | 2                          | 58.3                          | 124.03  | 55.23-60.23                       |
| MWB-27(I)  | Compliance                    | Phase 5                      | 326,945   | 2,141,567    | 2                          | 60.1                          | 128.63  | 57.23-62.23                       |
| MWB-29(I)  | Compliance                    | Phase 5                      | 325,871   | 2,141,554    | 2                          | 60                            | 138.08  | 57.68-62.68                       |
| MWB-32(I)  | Detection                     | Phase 5                      | 327,393   | 2,141,831    | 2                          | 62.2                          | 124.79  | 54.56 to 64.56                    |
| MWB-34(I)  | Detection                     | Phase 3/4                    | 327,598   | 2,142,433    | 2                          | 60                            | 125.80  | 43.95 to 53.95                    |
| MWB-35(I)  | Background                    | Phases 6/7                   | 324,786   | 2,144,747    | 2                          | 60                            | 147.93  | 50.00 to 60.00                    |
| MWB-39(I)  | Detection                     | Phase 6                      | 327,321   | 2,144,202    | 2                          | 60                            | 126.76  | 55.00 to 60.00                    |
| MWB-7(D)   | Water Levels Only             |                              |   |              |                            | 130.32 <sup>3</sup>           | 121.65  | 111.63-116.63                     |
| MWB-12(D)  | Water Levels Only             |                              |   |              |                            |                               | 124.56  | 109.28-114.68                     |
| MWB-14(D)  | Water Levels Only             |                              |   |              |                            | 111.47 <sup>3</sup>           | 125.87  | 103.47-108.47                     |
| MWB-25(D)  | Water Levels Only             |                              |   |              |                            |                               | 124.64  | 103.54-108.54                     |
| MWB-27(D)  | Water Levels Only             |                              |   |              |                            |                               | 128.88  | 104.78-109.78                     |
| MWB-29(D)  | Water Levels Only             |                              |   |              |                            |                               | 138.18  | 106.78-111.78                     |
| MWB-31(D)  | Water Levels Only             |                              |   |              |                            |                               | 156.15  | 126.65-131.65                     |
| MWB-32(D)  | Water Levels Only             |                              |   |              |                            |                               | 124.93  | 98.81 to 108.81                   |
| MWB-34(D)  | Water Levels Only             |                              |   |              |                            |                               | 125.92  | 90.78 to 100.78                   |

1. From Appendix G, Water Quality Monitoring Program for the Trail Ridge Landfill, CDM 2014 unless otherwise noted.
2. From February 2017 Event - Semiannual Groundwater and Surface Water Monitoring Report, Golder, 2017.
3. From Pro-Tech, provided August 2017.

The current permit requires semi-annual sampling of the background and detection shallow zone monitoring wells for the field and laboratory parameters listed below.

**Field Parameters**

- Static Water Level (before purging)
- Specific Conductivity
- pH
- Dissolved Oxygen (DO)
- Turbidity
- Temperature
- Color and sheens by observation
- Oxidation Reduction Potential (ORP)

**Laboratory Parameters**

- Chlorides
- Nitrate
- Total Dissolved Solids (TDS)
- Iron
- Sodium
- Mercury
- Ammonia – N, Total
- Parameters listed in the 1991 version of 40 CFR 258, Appendix I

The current permit requires semi-annual sampling of the background and detection intermediate zone monitoring wells for the field and laboratory parameters listed below.

**Field Parameters**

- Static Water Level (before purging)
- Specific Conductivity
- pH
- Dissolved Oxygen
- Turbidity
- Temperature
- ORP

**Laboratory Parameters**

- Chlorides
- Nitrate
- Total Dissolved Solids (TDS)
- Iron
- Sodium
- Ammonia – N, Total

If the results of the analysis for the intermediate zone monitoring wells indicates that leachate is impacting groundwater (elevated concentrations of the sampled constituents), then the well(s) in question will be sampled in the next sampling event for the parameters listed in 62-701-510 (7)(a), FAC.

## 2.2 Surface Water Monitoring Program

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The Site surface water monitoring system consists of seven surface water monitoring locations: SW-1, SW-3, SW-4, SW-5, SW-6, SW-7 and SW-B (Figure 2). SW-4 monitors the new retention pond associated with an interceptor ditch which is designed to capture shallow groundwater and surface water migrating on to the Trail Ridge property from the west. SW-5 and SW-6 monitor the new retention pond that captures runoff from the expansion areas (Phases 6-14). SW-7 is a point that is further downgradient of the ponds. SW-B is intended to be a background water quality sampling point and is located in the outer interceptor ditch on the southwestern side of the expansion area.

The current permit requires semi-annual sampling of the surface water locations for the field and laboratory parameters listed below.

### Field Parameters

- Static Water Level (before purging)
- Specific Conductivity
- pH
- Dissolved Oxygen
- Turbidity
- Temperature
- Color and sheens by observation
- ORP

### Laboratory Parameters

- Unionized Ammonia as N
- Total Hardness as CaCO<sub>3</sub>
- Biochemical Oxygen Demand (BOD<sub>5</sub>)
- Copper
- Iron
- Mercury
- Nitrate/Nitrogen
- Zinc
- Total Dissolved Solids (TDS)
- Total Organic Carbon (TOC)
- Fecal Coliform
- Total Phosphorus
- Chlorophyll-a
- Total Nitrogen
- Chemical Oxygen Demand (COD)
- Total Suspended Solids (TSS)
- Parameters listed in the 1991 version of 40 CFR 258, Appendix I

### 2.3 Sample Collection Analysis

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Groundwater and surface water sampling was conducted in accordance with F.A.C. Chapter 62-160 and FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01). Atlantic Coast Consulting, Inc. (ACC) field personnel collected groundwater and surface water samples for laboratory analysis from monitoring locations listed in Sections 2.1 and 2.2 on February 18, 21, and 22, 2022 and a limited resampling event on March 24, 2022.

Groundwater monitoring wells that were sampled were purged with dedicated QED bladder pumps with Teflon-lined tubing extending to the top of the well casing. Wells were purged using low-flow sampling methods; a minimum of one well volume was purged prior to stabilization for wells where the water table is located within the well screen. Field parameters including static water level, pH, specific conductance, temperature, turbidity, dissolved oxygen, oxidation-reduction potential and color/sheen (by observation) were recorded during purging and prior to sampling. Once purging was complete, ACC field personnel collected groundwater samples from the dedicated pumps and tubing in laboratory-provided containers, and placed the samples in coolers with ice. On February 22, 2022, surface water samples were collected from the surface water monitoring points using a laboratory-provided container. Instrument calibration records (FD 9000-8) and completed groundwater sampling logs (FD 9000-24) are provided along with the laboratory report in Appendix A.

Advanced Environmental Laboratories, Inc. (AEL), a Florida-certified laboratory (DOH Certification #E82001[AEL-G] and #E82574[AEL-JAX] [FL NELAC Certification]) analyzed groundwater and surface water samples collected in February 2022, for the parameters identified in Section II and Section III, respectively, of the facility permit Water Quality Monitoring Plan and listed previously herein.

### 3 GROUNDWATER ELEVATION DATA

For this semi-annual report, CEC performed the groundwater flow assessment of the surficial aquifer using groundwater depth to water measurements obtained on February 18, 2022. ACC field personnel measured water levels in Site monitoring wells prior to purging and sampling activities in accordance with procedures described in the facility permit. Water levels were measured at active groundwater monitoring wells at the Site within a 24-hour period to evaluate static groundwater conditions across the entire Site. Field personnel opened the monitoring wells to allow groundwater levels to equilibrate to atmospheric conditions, and then measured the depth to groundwater to within 0.01 feet relative to the top of the inner PVC well casing using an electronic water level indicator. CEC calculated water table elevations at each well to evaluate the general direction of groundwater flow in the uppermost aquifer underlying the Site. The calculations were performed by taking the difference between the measured depth to groundwater and the top of casing elevation surveyed relative to the National Geodetic Vertical Datum (NGVD) for each well (Table 2). Table 3 lists the monitoring locations, depths to water, and groundwater elevations.

Figures 3, 4, and 5 show shallow, intermediate, and deep potentiometric contours for the surficial aquifer, respectively. Horizontal groundwater flow beneath the Site in the uppermost aquifer is to the east at shallow, intermediate, and deep depths. The vertical groundwater flow is slightly downward on the western side (high ground) and slightly upward on the east side (low ground). The direction of groundwater flow is consistent with measurements from previous monitoring events.

**Table 3 - Water Level Measurements  
Trail Ridge Landfill, Jacksonville, Florida  
February 2022**

| Well ID                   | TOC Elevation | Depth to Water | Groundwater Elevation |
|---------------------------|---------------|----------------|-----------------------|
|                           | (ft MSL)      | (ft BTOC)      | (ft MSL)              |
| <b>Shallow Wells</b>      |               |                |                       |
| MWB-2(S)                  | 146.64        | 10.66          | 135.98                |
| MWB-3(S)                  | 154.38        | 9.28           | 145.10                |
| MWB-7(S)                  | 123.29        | 11.2           | 112.09                |
| MWB-11(S)                 | 120.81        | 11.85          | 108.96                |
| MWB-12(S)                 | 124.63        | 11.24          | 113.39                |
| MWB-13(S)                 | 126.05        | 12.69          | 113.36                |
| MWB-14(S)                 | 126.05        | NM             | NM                    |
| MWB-20(S)                 | 121.01        | 10.10          | 110.91                |
| MWB-21(S)                 | 122.84        | 11.38          | 111.46                |
| MWB-22(S)                 | 126.97        | 12.59          | 114.38                |
| MWB-23(S)                 | 125.34        | 16.7           | 108.64                |
| MWB-24(S)                 | 126.04        | 7.96           | 118.08                |
| MWB-25(S)                 | 125.22        | 9.27           | 115.95                |
| MWB-26(S)                 | 126.55        | 8.73           | 117.82                |
| MWB-27(S)                 | 128.42        | 8.78           | 119.64                |
| MWB-29(S)                 | 138.02        | 8.78           | 129.24                |
| MWB-32(S)                 | 124.64        | 9.48           | 115.16                |
| MWB-33(S)                 | 125.90        | 10.84          | 115.06                |
| MWB-34(S)                 | 125.78        | 9.72           | 116.06                |
| MWB-35(S)                 | 147.79        | 8.17           | 139.62                |
| MWB-39(S)                 | 126.85        | 14.4           | 112.45                |
| MWB-40(S)                 | 115.41        | 10.40          | 105.01                |
| SGMW-1(S)R                | 140.30        | 15.97          | 124.33                |
| SGMW-2(S)                 | 130.55        | 15.41          | 115.14                |
| <b>Intermediate Wells</b> |               |                |                       |
| MWB-2(I)                  | 145.73        | 13.5           | 132.23                |
| MWB-3(I)                  | 151.86        | 15.84          | 136.02                |
| MWB-7(I)                  | 121.53        | 8.71           | 112.82                |
| MWB-11(IR)                | 120.43        | 16.24          | 104.19                |
| MWB-12(I)                 | 124.62        | 10.67          | 113.95                |
| MWB-13(I)                 | 125.98        | 18.79          | 107.19                |
| MWB-14(I)                 | 125.92        | 12.42          | 113.50                |
| MWB-25(I)                 | 124.03        | 8.91           | 115.12                |
| MWB-27(I)                 | 128.63        | 10.72          | 117.91                |
| MWB-29(I)                 | 138.08        | 10.44          | 127.64                |
| MWB-32(I)                 | 124.79        | 10.56          | 114.23                |
| MWB-34(I)                 | 125.80        | 11.14          | 114.66                |
| MWB-35(I)                 | 147.93        | 10.62          | 137.31                |
| MWB-39(I)                 | 126.76        | 13.65          | 113.11                |
| <b>Deep Wells</b>         |               |                |                       |
| MWB-7(D)                  | 121.65        | 4.97           | 116.68                |
| MWB-12(D)                 | 124.56        | 8.46           | 116.10                |
| MWB-14(D)                 | 125.87        | 12.44          | 113.43                |
| MWB-25(D)                 | 124.64        | 9.51           | 115.13                |
| MWB-27(D)                 | 128.88        | 11.07          | 117.81                |
| MWB-29(D)                 | 138.18        | 10.55          | 127.63                |
| MWB-31(D)                 | 156.15        | 20.63          | 135.52                |
| MWB-32(D)                 | 124.93        | 10.72          | 114.21                |
| MWB-34(D)                 | 125.92        | 11.32          | 114.60                |

**Notes:**

TOC - top of casing; ft BTOC - feet below top of casing; ft MSL - feet above mean sea level; NM - Not Measured

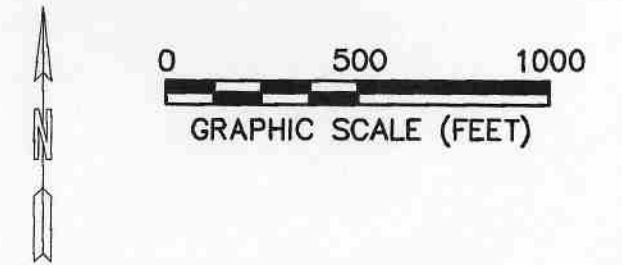
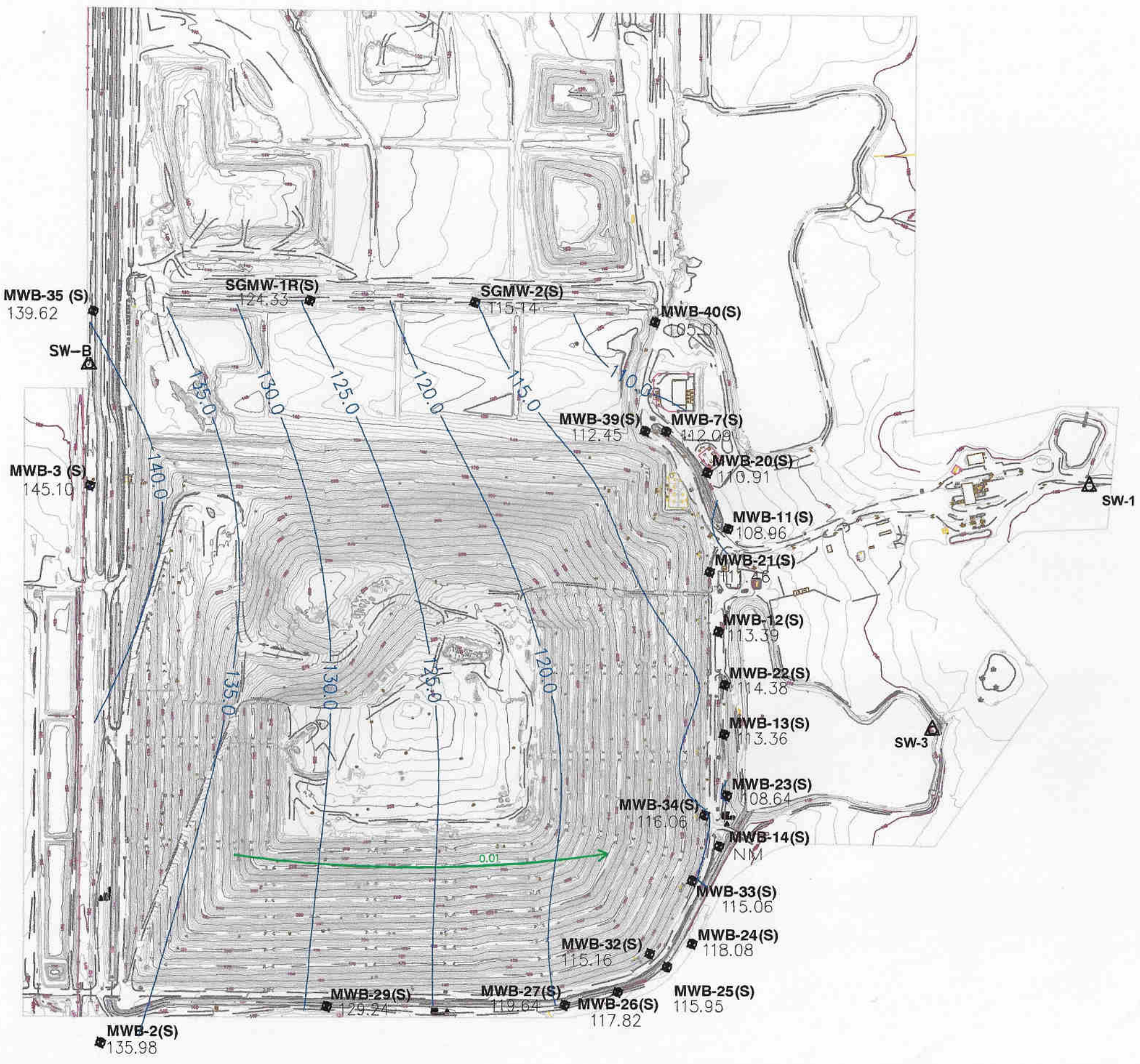
Depth to water measurements collected by ACC on February 18, 2022. Top of casing elevations based on groundwater well survey data provided in August 2017 by Golder, CDM, Pro-Tech, and CEC 2018.

**LEGEND**

- 2' CONTOURS
- 10' CONTOURS
- POTENTIOMETRIC CONTOURS AT 5 FOOT ELEVATION INTERVALS
- GROUNDWATER FLOW DIRECTION WITH HORIZONTAL FLOW GRADIENT
- MWB-3(S) GROUNDWATER MONITORING WELL
- WATERTABLE ELEVATION (IN FEET AMSL)
- SW-B SURFACE WATER SAMPLING POINT

**NOTES:**

1. THE TOPOGRAPHIC MAP WAS PREPARED BY SOUTHERN RESOURCES MAPPING CORPORATION FROM A PHOTOGRAPHIC FLY OVER COMPLETED JANUARY 25, 2017 AND WAS COMPILED IN FEBRUARY 2017.
2. MWB-14(S)\* WAS UNABLE TO BE READ DUE TO A PUMP IN THE MONITORING WELL AT OR ABOVE THE WATER TABLE.



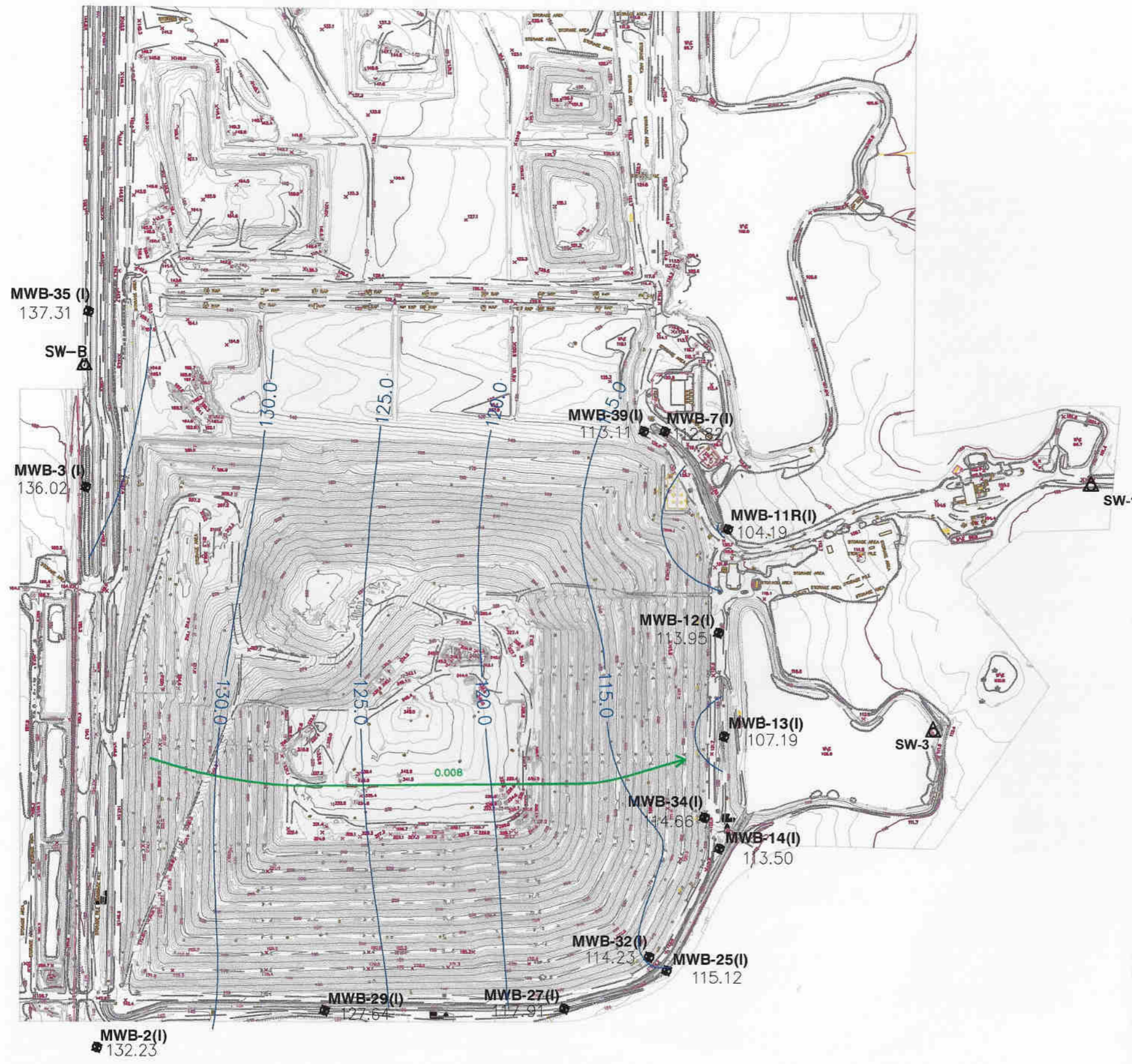
*KGB*  
51512

The seal is circular and contains the text: KENNETH GUILBEAULT, LICENSE No. 2907, STATE OF FLORIDA, PROFESSIONAL GEOLOGIST.

**CEC**

**FIGURE 3:  
SHALLOW WELLS  
POTENTIOMETRIC MAP 02/18/2022  
TRAIL RIDGE LANDFILL  
JACKSONVILLE, FL**



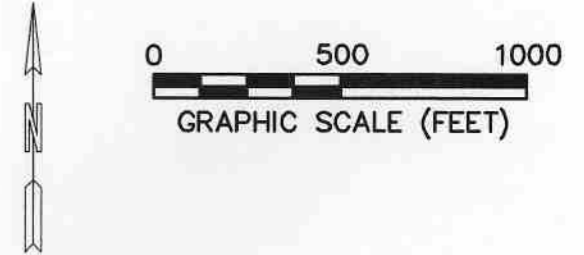


**LEGEND**

|  |  |
|--|--|
|  | 2' CONTOURS  |
|  | 10' CONTOURS   |
|  | POTENTIOMETRIC CONTOURS AT 5 FOOT ELEVATION INTERVALS    |
|  | GROUNDWATER FLOW DIRECTION WITH HORIZONTAL FLOW GRADIENT |
|  | MWB-3(I) GROUNDWATER MONITORING WELL                     |
|  | 148.17 WATERTABLE ELEVATION (IN FEET AMSL)               |
|  | SW-B SURFACE WATER SAMPLING POINT                        |

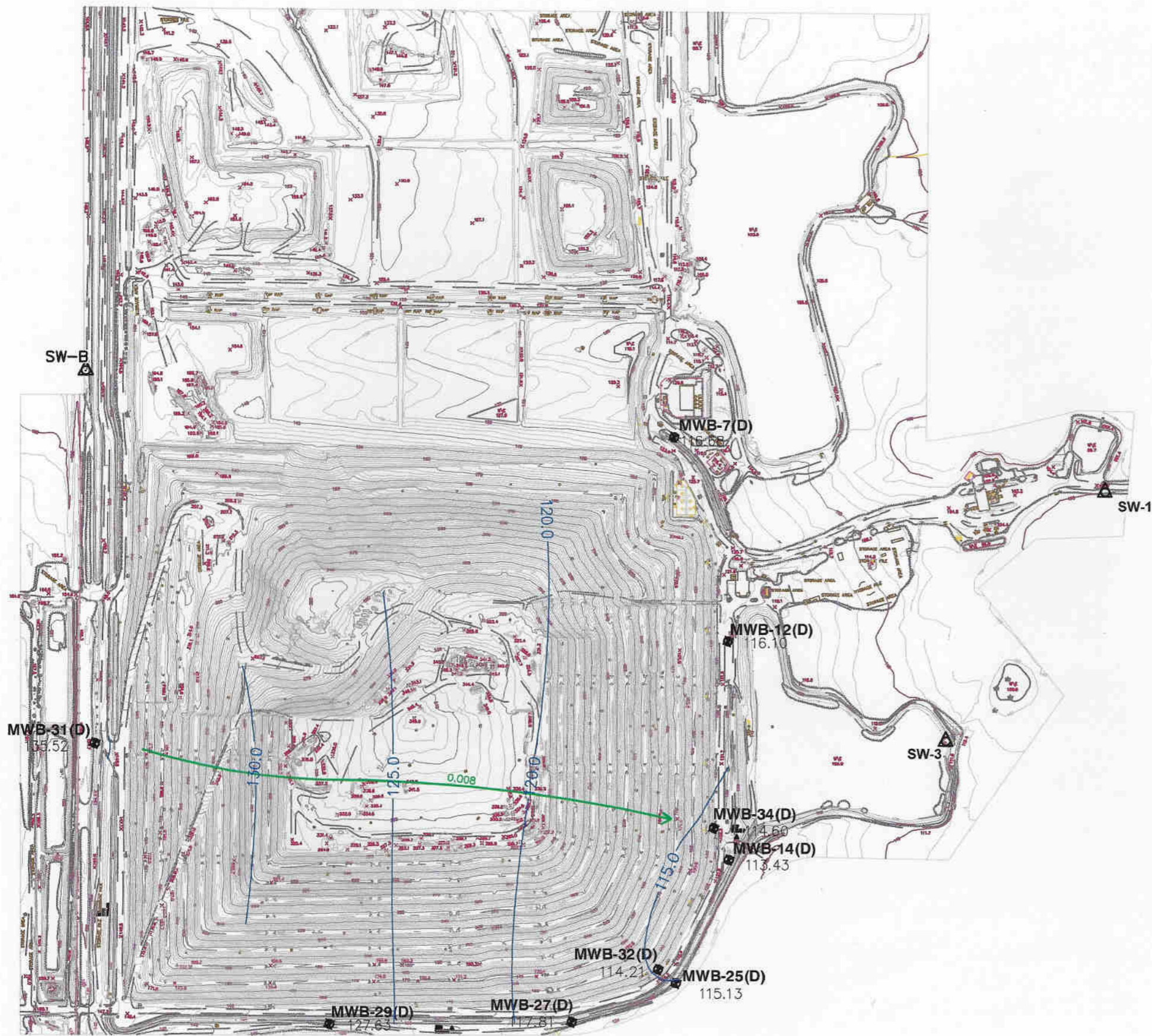
**NOTES:**

1. THE TOPOGRAPHIC MAP WAS PREPARED BY SOUTHERN RESOURCES MAPPING CORPORATION FROM A PHOTOGRAPHIC FLY OVER COMPLETED JANUARY 25, 2017 AND WAS COMPILED IN FEBRUARY 2017.



**CEC**

**FIGURE 4:  
INTERMEDIATE WELLS  
POTENTIOMETRIC MAP 02/18/2022  
TRAIL RIDGE LANDFILL  
JACKSONVILLE, FL**

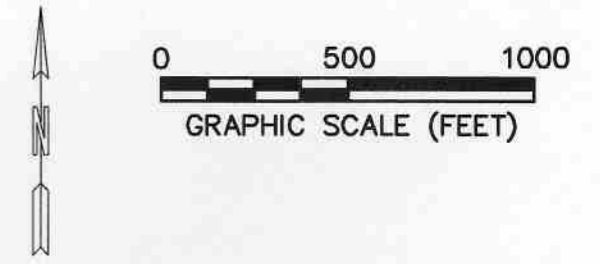


**LEGEND**

- 2' CONTOURS
- 10' CONTOURS
- POTENTIOMETRIC CONTOURS AT 5 FOOT ELEVATION INTERVALS
- GROUNDWATER FLOW DIRECTION WITH HORIZONTAL FLOW GRADIENT
- MWB-7(D) GROUNDWATER MONITORING WELL
- 148.17 WATERTABLE ELEVATION (IN FEET AMSL)
- SW-B SURFACE WATER SAMPLING POINT

**NOTES:**

1. THE TOPOGRAPHIC MAP WAS PREPARED BY SOUTHERN RESOURCES MAPPING COORPORATION FROM A PHOTOGRAPHIC FLY OVER COMPLETED JANUARY 25, 2017 AND WAS COMPILED IN FEBRUARY 2017.



**CEC**

**FIGURE 5:  
DEEP WELLS  
POTENTIOMETRIC MAP 02/18/2022  
TRAIL RIDGE LANDFILL  
JACKSONVILLE, FL**

## 4 WATER QUALITY MONITORING RESULTS

This section summarizes the results of the groundwater and surface water quality sampling for the first semi-annual sampling event performed February 18, 21, and 22, 2022 and a limited resampling event on March 24, 2022.

### 4.1 Quality Assurance and Quality Control (QA/QC) Results

ACC field personnel submitted the samples with trip blanks in coolers containing volatile organic compound (VOC) samples to AEL for analysis. The samples were received in good condition, properly preserved, and at proper temperatures. The laboratory provided additional QA/QC including analysis of method blanks, surrogates, laboratory control samples/laboratory control sample duplicates (LCS/LCSD), and matrix spike/matrix spike duplicates (MS/MSD). The QA/QC results for the laboratory reports associated with groundwater and surface water monitoring points from AEL Reports J2202333 and J2203966 are summarized below:

- Several analytes were detected between method detection limits (MDLs) and practical quantitation limits (PQLs); these detections were qualified by the laboratory with an "I."
- Due to high analyte concentration, several samples were analyzed at a dilution for various analyses. The reporting limits have been adjusted relative to the dilution required.
- The results for methane have been estimated in the matrix spike and matrix spike duplicate for J2203966001 (MWB-39S) because the concentration exceeded the instrument calibration range. The results were reported within the instrument calibration range in the parent sample. The results in the Matrix QC are qualified accordingly.
- The MS recovery of Vinyl Chloride and nitrate were outside control criteria. Recoveries in the LCS and LCSD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.
- The spike recovery of 1,2-Dibromo-3-Chloropropane for the LCS was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.
- The relative percent difference (RPD) for 1,2-Dibromo-3-Chloropropane between the LCS and the LCSD was outside control criteria due to relatively higher spike recovery in 4217205LCS in comparison with 4217206LCSD. Spike recoveries in the LCS failed high with non-detects and LCSD was within acceptable limits, indicating the analytical batch was in control. No further corrective action was required.
- The RPD for the following analyte(s) in the replicate matrix spike analyses of J2202333031 (SW-4) was outside control criteria: TKN. Failing RPD indicates inconsistency in the parent sample matrix. All spike recoveries in the MS, MSD and associated LCS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.
- The MS recovery of Chloride for J2202333036 (SGMW-1SR) was outside control criteria. Recoveries in the LCS and LCSD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.
- The spike recovery of Fluoride for the LCSD was outside the upper control criterion. The analyte in question was not detected in the associated client sample; J2202406001. The

error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

- The relative percent difference (RPD) for the following analyte in the replicate sample duplicate analyses of J2202333028 (SW-5) was outside control criteria: TSS. Failing RPD indicates inconsistency in the parent sample matrix. The LCS was within acceptable limits, indicating the analytical batch was in control. The data were qualified accordingly.
- Method Blank (MB) contained a low level of BOD above the Standard Method 5210 limit of 0.2 milligrams per liter (mg/L), but below the laboratory MDL. The slight positive bias implied by the elevated MB result was deemed insignificant. There were no adverse effects on the data.
- The spike recovery of BOD for the LCS was outside the lower control criterion. The error associated with the recovery equates to a low bias. There was insufficient sample remaining to reextract or reanalyze. All batch samples were qualified accordingly.
- Other QC issues identified were not considered significant and the remainder of the lab data, even if flagged, was considered usable without further qualification.

## 4.2 Surficial Aquifer Groundwater Quality

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The groundwater quality detections and exceedances of the primary or secondary drinking water standards (PDWS or SDWS) are summarized in Tables 4 and 5. In accordance with Chapter 62-701, FAC, groundwater results were compared to their respective PDWS or SDWS established in Chapter 62-550, FAC and incorporated via reference in Chapter 62-520, FAC. For this routine groundwater monitoring report, groundwater cleanup target levels (GCTLs) in Rule 62-777, FAC, were used for constituents that do not have a PDWS or SDWS to evaluate if a parameter is significantly above background levels. GCTLs are used as a screening tool for potential anomalies in the concentration data that may require further consideration or review. Appendix A includes the laboratory analytical data and field forms.

### 4.2.1 Metals Exceedances

Arsenic, chromium, and iron at some wells exceeded the applicable standards. These parameters are discussed below.

#### 4.2.1.1 Arsenic

The arsenic concentration in detection well MWB-12S [17 **I** micrograms per liter ( $\mu\text{g/L}$ )] exceeded the PDWS of 10  $\mu\text{g/L}$  during the February 2022 monitoring event. The detected concentration was an estimated value between the MDL and the PQL, therefore, this is not a true exceedance. This concentration was not consistent with historical concentrations and the well was scheduled to be resampled to confirm the detection. On March 24, 2022, detection well MWB-12S was resampled for arsenic. Arsenic was not detected above the PDWS of 10  $\mu\text{g/L}$  during the resample event at MWB-12S (0.49 **I**  $\mu\text{g/L}$ ). The result of the initial monitoring event was not confirmed.

#### 4.2.1.2 Chromium

The chromium concentration in detection well MWB-13S (110  $\mu\text{g/L}$ ) exceeded the PDWS of 100  $\mu\text{g/L}$  during the February 2022 monitoring event. This concentration was not consistent with historical concentrations and the well was scheduled to be resampled to confirm the detection.

Table 4. Summary of Shallow Groundwater Quality Analytical Results (Detected Parameters Only)  
Trail Ridge Landfill, February 2022

| Parameter                         | Units    | MCL     | Standard | MWB2S  | MWB3S   | MWB11S  | MWB12S  | MWB12S   | MWB13S  | MWB13S   | MWB20S  | MWB21S  | MWB22S  | MWB27S  | MWB29S  | MWB32S  | MWB33S  | MWB34S  | MWB35S  | MWB39S   | MWB39S | MWB40S  | GMW-1S  | SGMW-2S |
|-----------------------------------|----------|---------|----------|--------|---------|---------|---------|----------|---------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|--------|---------|---------|---------|
| <b>Volatile Organic Compounds</b> |          |         |          |        |         |         |         | Resample |         | Resample |         |         |         |         |         |         |         |         |         | Resample |        |         |         |         |
| 2-Butanone                        | ug/L     | NS      | NS       | 0.25 U | 0.25 U  | 0.25 U  | 0.25 U  | ---      | 0.25 U  | ---      | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.76 I   | ---    | 0.25 U  | 0.62 I  | 0.9 I   |
| Acetone                           | ug/L     | NS      | NS       | 0.5 U  | 0.5 U   | 4.3     | 0.5 U   | ---      | 0.5 U   | ---      | 0.5 U   | 2.5     | 0.5 U   | 0.5 U   | 0.5 U   | 0.5 U   | 0.5 U   | 0.5 U   | 0.5 U   | 0.5 U    | ---    | 3.6     | 2.3     | 3.7     |
| Benzene                           | ug/L     | 1       | PDWS     | 0.25 U | 0.25 U  | 0.25 U  | 0.25 U  | ---      | 0.25 U  | ---      | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.28 I  | 0.25 U  | 0.25 U  | 3.7      | 1.3    | 0.25 U  | 0.25 U  | 0.25 U  |
| Vinyl Chloride                    | ug/L     | 1       | PDWS     | 0.25 U | 0.25 U  | 0.25 U  | 0.25 U  | ---      | 0.25 U  | ---      | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.25 U  | 0.75 I   | ---    | 0.25 U  | 0.25 U  | 0.25 U  |
| Arsenic                           | ug/L     | 10      | PDWS     | 8 U    | 8 U     | 8.8 I   | 17 I    | 0.49 I   | 8 U     | ---      | 8 U     | 8 U     | 8 U     | 8 U     | 8 U     | 8 U     | 8 U     | 8 U     | 8 U     | 8 U      | ---    | 8 U     | 10 I    | 8 U     |
| Barium                            | ug/L     | 2000    | PDWS     | 6.3 I  | 15      | 34      | 3 U     | ---      | 3.5 I   | ---      | 3 U     | 20      | 3 U     | 3 U     | 11 I    | 12 I    | 9.7 I   | 7.9 I   | 3 U     | 13       | ---    | 79      | 330     | 76      |
| Chromium                          | ug/L     | 100     | PDWS     | 5 U    | 5 U     | 5 U     | 5 U     | ---      | 110     | 11       | 5 U     | 5 U     | 5 U     | 5 U     | 5 U     | 5 U     | 5 U     | 5 U     | 5 U     | 5 U      | ---    | 5 U     | 13 I    | 5.1 I   |
| Cobalt                            | ug/L     | NS      | NS       | 1 U    | 1 U     | 1 U     | 1 U     | ---      | 1 U     | ---      | 1 U     | 1.6 I   | 1 U     | 1 U     | 1 U     | 1 U     | 1 U     | 1 U     | 1 U     | 1 U      | ---    | 1 U     | 1 U     | 1 U     |
| Iron                              | ug/L     | 300     | SDWS     | 330 I  | 750 I   | 1100    | 200 U   | ---      | 1600    | ---      | 200 U   | 350 I   | 200 U   | 200 U   | 350 I   | 950     | 440 I   | 720 I   | 200 U   | 290 I    | ---    | 1200    | 540 I   | 670 I   |
| Lead                              | ug/L     | 15      | PDWS     | 4.1 I  | 3 U     | 3 U     | 3 U     | ---      | 3.3 I   | ---      | 3 U     | 3 U     | 3 U     | 3 U     | 4.4 I   | 3.1 I   | 3 U     | 3 U     | 3 U     | 5.2 I    | ---    | 4.5 I   | 3 U     | 3 U     |
| Mercury                           | ug/L     | 2       | PDWS     | 0.05 I | 0.011 U | 0.011 U | 0.011 U | ---      | 0.014 I | ---      | 0.023 I | 0.021 I | 0.011 U | 0.013 I | 0.011 U | 0.036 I | 0.013 I | 0.025 I | 0.011 I | 0.014 I  | ---    | 0.012 I | 0.014 I | 0.017 I |
| Nickel                            | ug/L     | 100     | PDWS     | 10 U   | 10 U    | 10 U    | 10 U    | ---      | 10 U    | ---      | 10 U    | 14 I    | 10 U    | 10 U    | 10 U    | 10 U    | 10 U    | 10 U    | 10 U    | 11 I     | ---    | 11 I    | 18 I    | 10 U    |
| Selenium                          | ug/L     | 50      | PDWS     | 1.2 U  | 1.2 U   | 1.2 U   | 5.5     | ---      | 4 I     | ---      | 1.3 I   | 1.2 U   | 1.2 U   | 1.2 U   | 1.2 U   | 3.5 I   | 1.2 U   | 2.8 I   | 1.2 U   | 1.2 U    | ---    | 12 U    | 1.2 U   | 1.2 U   |
| Sodium                            | mg/L     | 160     | PDWS     | 3.4    | 5.1     | 13      | 12      | ---      | 47      | ---      | 48      | 110     | 93      | 26      | 9       | 9.8     | 6.1     | 140     | 2 I     | 140      | ---    | 81      | 59      | 11      |
| Vanadium                          | ug/L     | NS      | NS       | 5 I    | 2.7 I   | 6.1 I   | 30      | ---      | 44      | ---      | 10      | 10      | 5.7 I   | 12      | 5.2 I   | 31      | 7.5 I   | 67      | 3.9 I   | 11       | ---    | 12      | 9.6     | 4.4 I   |
| Zinc                              | ug/L     | 5000    | SDWS     | 50 U   | 50 U    | 50 U    | 50 U    | ---      | 50 U    | ---      | 50 U    | 96 I    | 50 U    | 50 U    | 50 U    | 50 U    | 50 U    | 50 U    | 50 U    | 50 U     | ---    | 50 U    | 50 U    | 50 U    |
| Ammonia (N)                       | mg/L     | NS      | NS       | 0.05   | 0.04 I  | 0.08    | 0.07    | ---      | 0.02 U  | ---      | 3       | 4       | 0.06    | 0.7     | 0.2     | 0.6     | 1       | 3       | 0.07    | 10       | ---    | 4       | 0.5     | 0.05    |
| Chloride                          | mg/L     | 250     | SDWS     | 4.4 I  | 8.6     | 19      | 13      | ---      | 74      | ---      | 64      | 170     | 120     | 53      | 15      | 21      | 15      | 220     | 4 I     | 370      | 230    | 140     | 110     | 4.3 I   |
| Methane                           | ug/L     | NS      | NS       | ---    | ---     | ---     | ---     | ---      | ---     | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     | ---     | ---     | ---      | 285    | ---     | ---     | ---     |
| Nitrate (N)                       | mg/L     | 10      | PDWS     | 0.25 I | 0.2 U   | 0.37 I  | 0.36 I  | ---      | 0.88 I  | ---      | 0.31 I  | 1 I     | 0.4 U   | 0.25 I  | 0.2 I   | 0.63 I  | 0.22 I  | 1.1 I   | 1.1 I   | 1 I      | ---    | 0.22 I  | 1.1     | 0.28 I  |
| Residues- Filterable (TDS)        | mg/L     | 500     | SDWS     | 71     | 34      | 90      | 479     | ---      | 313     | ---      | 200     | 576     | 463     | 731     | 61      | 194     | 100     | 819     | 16      | 748      | ---    | 350     | 334     | 32      |
| Dissolved Oxygen                  | mg/L     | NS      | NS       | 1.5    | 1.3     | 0.6     | 1.2     | 0.7      | 1.3     | 2.5      | 0.5     | 0.3     | 0.2     | 0.4     | 0.3     | 0.3     | 0.4     | 0.3     | 0.3     | 0        | 0.4    | 0.2     | 0.7     | 0.5     |
| pH                                | SU       | 6.5-8.5 | SDWS     | 5.03   | 4.6     | 4.42    | 6.07    | 5.78     | 5.98    | 6.02     | 5.15    | 6.01    | 6.24    | 5.79    | 4.94    | 5.54    | 5.77    | 6.57    | 5.01    | 4.95     | 5.41   | 5.47    | 5.57    | 5.08    |
| Specific Conductance              | umhos/cm | NS      | NS       | 38     | 62      | 116     | 271     | 327      | 429     | 478      | 282     | 1070    | 731     | 362     | 102     | 252     | 188     | 1530    | 30      | 1280     | 657    | 578     | 342     | 37      |
| Temperature, Water                | Deg C    | NS      | NS       | 19.4   | 18.5    | 27.2    | 22.3    | 20.3     | 22.7    | 20.6     | 27.6    | 25.1    | 22.7    | 20.4    | 19.7    | 21.1    | 22.3    | 23.5    | 18.9    | 25.1     | 19.6   | 26.1    | 24.4    | 24.7    |
| Turbidity                         | NTU      | NS      | NS       | 19.9   | 3.6     | 3.8     | 3.7     | 4        | 7.5     | 4.3      | 8.7     | 3.1     | 2.8     | 5.7     | 2       | 7.8     | 3.4     | 3.4     | 3.7     | 2.4      | 1.9    | 3.6     | 9.2     | 4.7     |

- Notes:
1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
  2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
  3. Groundwater Clean-Up Target Level (62-777 F.A.C.) are used for screening purposes only to evaluate if a parameter is significantly above background levels.
  4. NS = No numeric standard has been set for this analyte.
  5. mg/L = milligrams per liter
  6. ug/L = micrograms per liter
  7. NTU = nephelometric turbidity units
  8. umhos/cm = micromhos per centimeter
  9. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
  10. deg C = degrees Celsius
  11. U = Analyte concentration was below the laboratory detection limit (value shown).
  12. I = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
  13. V = Analyte was detected in the sample and associated method blank.

Table 5. Summary of Intermediate Groundwater Quality Analytical Results (Detected Parameters Only)  
Trail Ridge Landfill, February 2022

| Parameter                         | Units    | MCL     | Standard | MWB-2I | MWB-3I | MWB-11I (R) | MWB-11I (R) | MWB-12I  | MWB-13I | MWB-27I | MWB-29I | MWB-32I | MWB-34I | MWB-35I | MWB-39I |
|-----------------------------------|----------|---------|----------|--------|--------|-------------|-------------|----------|---------|---------|---------|---------|---------|---------|---------|
| <b>Volatile Organic Compounds</b> |          |         |          |        |        |             |             | Resample |         |         |         |         |         |         |         |
| 2-Butanone                        | ug/L     | 4200    | GCTL     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Acetone                           | ug/L     | 6300    | GCTL     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Benzene                           | ug/L     | 1       | PDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Vinyl Chloride                    | ug/L     | 1       | PDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| <b>Metals</b>                     |          |         |          |        |        |             |             |          |         |         |         |         |         |         |         |
| Arsenic                           | ug/L     | 10      | PDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Barium                            | ug/L     | 2000    | PDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Chromium                          | ug/L     | 100     | PDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Cobalt                            | ug/L     | 140     | GCTL     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Iron                              | ug/L     | 300     | SDWS     | 370 I  | 770 I  | 340 I       | 730 I       | 200 U    | 340 I   | 500 I   | 300 I   | 270 I   | 260 I   | 200 U   | 200 U   |
| Lead                              | ug/L     | 15      | PDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Mercury                           | ug/L     | 2       | PDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Nickel                            | ug/L     | 100     | PDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Selenium                          | ug/L     | 50      | PDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Sodium                            | mg/L     | 160     | PDWS     | 5      | 3.5    | 3.9         | ---         | 3.2 I    | 3.2     | 3.3     | 3.6     | 3.1 I   | 3.3     | 3 I     | 3.5     |
| Vanadium                          | ug/L     | 49      | GCTL     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| Zinc                              | ug/L     | 5000    | SDWS     | ---    | ---    | ---         | ---         | ---      | ---     | ---     | ---     | ---     | ---     | ---     | ---     |
| <b>General Chemistry</b>          |          |         |          |        |        |             |             |          |         |         |         |         |         |         |         |
| Ammonia (N)                       | mg/L     | 2.8     | GCTL     | 0.02 U | 0.02 U | 0.02 U      | ---         | 0.04 I   | 0.06    | 0.08    | 0.06    | 0.02 U  | 0.05    | 0.02 U  | 0.05    |
| Chloride                          | mg/L     | 250     | SDWS     | 7.8 I  | 6.9 I  | 7 I         | ---         | 5.1 I    | 5.5 I   | 5.4 I   | 6.1 I   | 5.2 I   | 5.7 I   | 2.8 I   | 5.6 I   |
| Nitrate (N)                       | mg/L     | 10      | PDWS     | 0.21 I | 0.22 I | 0.31 I      | ---         | 0.2 U    | 0.2 U   | 0.2 I   | 0.79 I  | 0.2 U   | 0.24 I  | 0.21 I  | 0.26 I  |
| Residues- Filterable (TDS)        | mg/L     | 500     | SDWS     | 36     | 25     | 23          | ---         | 40       | 38      | 25      | 31      | 30      | 52      | 34      | 27      |
| <b>Field Parameters</b>           |          |         |          |        |        |             |             |          |         |         |         |         |         |         |         |
| Dissolved Oxygen                  | mg/L     | NS      | NS       | 0.5    | 0.6    | 0.3         | 0.2         | 0.4      | 0.2     | 0.3     | 0.3     | 0.3     | 0.4     | 0.3     | 0.5     |
| pH                                | SU       | 6.5-8.5 | SDWS     | 4.71   | 4.63   | 4.88        | 4.52        | 5.22     | 5.2     | 5.49    | 5.06    | 5.28    | 5.41    | 4.83    | 5.3     |
| Specific Conductance              | umhos/cm | NS      | NS       | 39     | 38     | 34          | 38          | 39       | 35      | 47      | 39      | 39      | 39      | 33      | 35      |
| Temperature, Water                | Deg C    | NS      | NS       | 19.8   | 20.7   | 28.3        | 24.6        | 24.4     | 26.9    | 22.1    | 25      | 21.9    | 27.3    | 20.8    | 25.5    |
| Turbidity                         | NTU      | NS      | NS       | 2.6    | 1.8    | 2.2         | 2.15        | 2.3      | 1.7     | 4.3     | 7.6     | 4.6     | 2.9     | 2.9     | 2.8     |

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. Groundwater Clean-Up Target Level (62-777 F.A.C.) are used for screening purposes only to evaluate if a parameter is significantly above background levels.
4. NS = No numeric standard has been set for this analyte.
5. mg/L = milligrams per liter
6. ug/L = micrograms per liter
7. NTU = nephelometric turbidity units
8. umhos/cm = micromhos per centimeter
9. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
10. deg C = degrees Celsius
11. U = Analyte concentration was below the laboratory detection limit (value shown).
12. I = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
13. V = Analyte was detected in the sample and associated method blank.

On March 24, 2022, detection well MWB-13S was resampled for chromium. Chromium was not detected above the PDWS of 100 µg/L during the resample event at MWB-13S (11 µg/L). The result of the initial monitoring event was not confirmed.

#### 4.2.1.3 Iron

The concentration of iron in the groundwater at the Site in the shallow and intermediate surficial aquifer ranged from non-detected to 1,600 µg/L during the first 2022 semi-annual sampling event. Detectable iron concentrations exceeded the SDWS of 300 µg/L in:

- Background monitoring wells MWB-2S, MWB-2I, MWB-3S, and MWB-3I
- Shallow Wells: MWB-11S, MWB-13S, MWB-21S, MWB-29S, MWB-32S, MWB-33S, MWB-34S, MWB-40S, SGMW-1SR, and SGMW-2S
- Intermediate Wells: MWB-11I(R), MWB-13I, and MWB-27I

The iron exceedances during the February 2022 sampling event were generally consistent with historical data. Based on this data, it appears that the presence of iron in the groundwater at most wells is not directly related to the landfill operations, but is related to the dissolution of naturally-occurring iron from the soil.

Iron concentrations at MWB-11I(R) were elevated above historical concentrations. The iron detection at MWB-11I(R) was an estimated concentration, therefore, this is not a true exceedance. This detection appears to be an outlier though neither the sampler nor the laboratory reported issues that could bias the iron result high. Leachate indicator parameters (sodium and chloride) for MWB-11I(R) remained steady suggesting the issue is not related to a leachate release. Iron at MWB-11I(R) will be monitored during the next semi-annual monitoring event to evaluate if the detected concentration was an outlier.

#### 4.2.2 Inorganic Parameters Exceedances

Chloride, TDS, and pH at some wells exceeded the applicable standards. These parameters are discussed below.

##### 4.2.2.1 Chloride

The FDEP SDWS of 250 mg/L for chloride was exceeded at detection well MWB-39S (370 mg/L). This concentration was not consistent with historical concentrations and the well was scheduled to be resampled to confirm the detection. On March 24, 2022, detection well MWB-39S was resampled for chloride. Chloride was not detected above the SDWS of 250 mg/L during the resample event at MWB-39S (230 mg/L). The result of the initial monitoring event was not confirmed.

Based on past results, a field evaluation was conducted during the 4th quarter of 2020 in the area of MWB-39S and MWB-40S. During the evaluation two liquid seeps were noted in areas adjacent to MWB-39S and MWB-40S on the slide slope terraces. A French-drain was quickly installed connecting the two seeps and then a sump and pump were installed to remove the liquid. The sump was connected to the leachate force main. There is no evidence these seeps affected other wells at this time and no additional seeps were noted during the evaluation. There is no evidence this release has affected any other wells at this time, including the intermediate

well MWB-39I in the same location as MWB-39S, and thus the impacts remain contained to a small area. Trail Ridge Landfill, Inc. (TRL) will continue to monitor MWB-39S and MWB-40S to ensure no other wells are impacted and concentrations decline.

#### 4.2.2.2 TDS

The FDEP SDWS of 500 mg/L for total dissolved solids (TDS) was exceeded at detection wells MWB-21S (576 mg/L), MWB-27S (731 mg/L), MWB-34S (819 mg/L), and MWB-39S (748 mg/L). The SDWS exceedances for TDS at MWB-21S and MWB-34S have been historically detected and reported to FDEP.

Based on past results, a field evaluation was conducted during the 4th quarter of 2020 in the area of MWB-39S and MWB-40S. During the evaluation two liquid seeps were noted in areas adjacent to MWB-39S and MWB-40S on the slide slope terraces. A French-drain was quickly installed connecting the two seeps and then a sump and pump were installed to remove the liquid. The sump was connected to the leachate force main. There is no evidence these seeps affected other wells at this time and no additional seeps were noted during the evaluation. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-39I in the same location as MWB-39S, and thus the impacts remain contained to a small area. TRL will continue to monitor MWB-39S and MWB-40S to ensure no other wells are impacted and concentrations decline.

The TDS concentration in MWB-34S continued an overall decreasing trend since 2017. This well continues to show minor impacts with elevated TDS that exceed the SDWS. The prior exceedances and detections were attributed to a leachate release that occurred in January 2017 which was quickly repaired. Additional information was provided in previous semi-annual monitoring reports. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-34I in the same location, and thus the impacts remain contained to a small area. TRL proposes to monitor MWB-34S to ensure no other wells are impacted and concentrations continue to decline.

#### 4.2.2.3 pH

The FDEP SDWS range of 6.5 standard units to 8.5 standard units for pH was not met at background monitoring wells or detection monitoring wells during the first semi-annual 2022 sampling event.

Low groundwater pH in this region is the result of low pH in precipitation, rapid recharge, and little buffering capacity of the surficial sands. The pH levels observed at the Site are characteristic of the groundwater in this region of Florida.

### 4.2.3 Organic Parameters Exceedances

#### 4.2.3.1 Benzene

Benzene was detected in monitoring well MWB-39S (3.7 µg/L) above the PDWS of 1 µg/L. On March 24, 2022, detection well MWB-39S was resampled for benzene. Benzene was detected above the PDWS of 1 µg/L during the resample event at MWB-39S (1.3 µg/L) therefore, the result of the initial monitoring event was not confirmed. The concentration of benzene in the resample



collected from MWB-39S during March 2022 is not considered to exceed the PDWS based on the rounding method described in FDEP Rounding Analytical Data for Site Rehabilitation Completion memorandum dated November 17, 2011.

#### *4.2.3.1 Other Detected Volatile Organic Compounds*

During the first semi-annual 2022 monitoring event there were some low-level VOC detections below FDEP water quality standards for the following parameters: acetone, 2-butanone, benzene, and vinyl chloride (see Table 4). These compounds will continue to be monitored to confirm that concentrations remain below their respective regulatory standards.

### **4.3 Surface Water Quality**

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Surface water analytical results were compared to Class III WQS. Standards are provided in Tables 6 and 7. In some cases, FAC Chapter 62-302.530 requires calculations for Class III standards based on sample hardness.

#### **4.3.1 Metals Exceedances**

With regard to the exceedances of metal water quality standards in the expansion area sampling points SW-4 through SW-7, the initial detections occurred during the first sampling event at these new ponds in 1H 2018. The majority of these exceedances were confirmed during a confirmation resampling event conducted in April 2018. In May and June 2018, TRL conducted a source investigation and submitted an Alternate Source Demonstration (ASD) to FDEP in July 2018. The ASD concluded elevated metal concentrations observed in the expansion area surface water ponds were likely associated with elevated turbidity and caused by contaminated run-on from the Chemours property and disturbance of native soils caused primarily by ongoing construction of the stormwater system. There was no evidence the exceedances were related to landfilling operations in Phase 6.

Additional sampling to evaluate run-on was conducted and TRL submitted an initial data summary to the Department on October 16, 2018. This data further supported the premise that run-on from Chemours is a significant source of sediment and contamination.

During this event, lead was detected above the calculated Class III WQS at surface water location SW-6 (3.9  $\mu\text{g/L}$ ). Lead detection at SW-6 was an estimated concentration, therefore, this is not a true exceedance. Water quality at SW-6 remains generally good. Lead was not detected above the calculated Class III WQS in any other surface water sampling locations during this event. Other metals were not detected above the WQS in other surface water sampling locations during this event.

#### **4.3.2 General Chemistry Exceedances**

Ammonia and dissolved oxygen at some surface water locations exceeded the applicable standards. These parameters are discussed below.

**Table 6. Summary of Surface Water Quality Analytical Results (Detected Parameters Only)  
Trail Ridge Landfill, February 2022**

| Parameter                         | MCL        | Units    | SW-1    | SW-3    | SW-4    | SW-5    | SW-6    | SW-7    |
|-----------------------------------|------------|----------|---------|---------|---------|---------|---------|---------|
| <b>Volatile Organic Compounds</b> |            |          |         |         |         |         |         |         |
| Acetone                           | 1700       | ug/L     | 0.5 U   | 4.8     | 0.5 U   | 0.5 U   | 0.5 U   | 0.5 U   |
| <b>Metals</b>                     |            |          |         |         |         |         |         |         |
| Arsenic                           | 50         | ug/L     | 11 I    | 8 U     | 8 U     | 12 I    | 8 U     | 11 I    |
| Barium                            | NS         | ug/L     | 31      | 32      | 15      | 32      | 38      | 16      |
| Chromium                          | See Below  | ug/L     | 5 U     | 7 I     | 5 U     | 5 U     | 5 U     | 5 U     |
| Calculated Chromium MCL           | Calculated | ug/L     | 77.6    | 120.12  | 75.4    | 84.8    | 84.1    | 45.6    |
| Iron                              | 1000       | ug/L     | 780 I   | 480 I   | 300 I   | 260 I   | 320 I   | 820     |
| Lead                              | See Below  | ug/L     | 3 U     | 3.2 I   | 3 U     | 3 U     | 3.9 I   | 3 U     |
| Calculated Lead MCL               | Calculated | ug/L     | 2.7     | 5.3     | 2.6     | 3.1     | 3.1     | 1.2     |
| Magnesium                         | NS         | mg/L     | 3.5     | 5.6     | 1.7     | 3       | 3.1     | 1.4     |
| Mercury                           |            | ug/L     | 0.024 I | 0.027 I | 0.025 I | 0.035 I | 0.021 I | 0.021 I |
| Vanadium                          | NS         | ug/L     | 2 U     | 3.9 I   | 2 U     | 5.1 I   | 6 I     | 3.9 I   |
| <b>General Chemistry</b>          |            |          |         |         |         |         |         |         |
| Ammonia (N)                       | See Below  | mg/L     | 0.2     | 8       | 0.02 I  | 0.04    | 0.2     | 0.04 I  |
| Calculated TAN Criteria           | Calculated |          | 4.34    | 3.27    | 6.38    | 4.03    | 5.86    | 6.32    |
| BOD                               | NS         | mg/L     | 8.3     | 12      | 10      | 21      | 2 U     | 8.9     |
| Calcium                           | NS         | mg/L     | 30      | 53      | 31      | 34      | 34      | 16      |
| Carbon- Total Organic             | NS         | mg/L     | 17      | 24      | 8       | 11      | 11      | 18      |
| COD                               | NS         | mg/L     | 62      | 94      | 30      | 43      | 56      | 75      |
| Nitrate (N)                       | NS         | mg/L     | 0.4 I   | 1 I     | 0.2 I   | 1       | 1       | 0.2 U   |
| Nitrogen- Total Kjeldahl          | NS         | mg/L     | 1       | 9.14    | 0.2 U   | 0.946   | 1.25    | 0.556   |
| Phosphorus- Total                 | NS         | mg/L     | 0.5 U   | 0.5 U   | 0.5 U   | 0.5 I   | 0.5 U   | 0.5 U   |
| Residues- Filterable (TDS)        | NS         | mg/L     | 209     | 345     | 128     | 196     | 210     | 115     |
| Residues- Nonfilterable (TSS)     | NS         | mg/L     | 12      | 10      | 3       | 9       | 2       | 8       |
| Total Hardness                    | NS         | mg/L     | 88      | 150     | 85      | 98      | 97      | 46      |
| <b>Field Parameters</b>           |            |          |         |         |         |         |         |         |
| Dissolved Oxygen                  | >5.0       | mg/L     | 5.1     | 7.7     | 6.6     | 7.4     | 7.2     | 4.2     |
| pH                                | 6.0-8.5    | SU       | 7.52    | 7.74    | 7.02    | 7.54    | 6.85    | 6.94    |
| Specific Conductance              | 1275       | umhos/cm | 275     | 606     | 181     | 284     | 282     | 108     |
| Temperature, Water                | NS         | Deg C    | 16.3    | 17.2    | 15.2    | 17.2    | 17.4    | 15.8    |
| Turbidity                         | 29         | NTU      | 7.6     | 5.7     | 8.6     | 8.8     | 12.3    | 13      |

Notes:

- Parameter MCL is a Surface Water Criterion (Chapter 62-302 F.A.C.).
- I = Analyte detected below quantitation limits.
- U = Analyte concentration was below the laboratory detection limit (value shown).
- Turbidity MCL is 29 NTUs over background levels. For comparison purposes, a background turbidity of 0 NTU was assumed in this table. However it is known that upgradient industrial properties contribute a high sediment load to Ponds 3 and 4 through run-on to the expansion area of the Trail Ridge property.
- MCL = Maximum Contamination Level.
- Yellow shaded values indicate parameter concentrations exceed MCL
- mg/L = milligrams per liter.
- ug/L = micrograms per liter.
- umhos/cm = micromhos/centimeter
- NTU = nephelometric turbidity units.
- NS = No numeric standard has been set for this analyte.
- Parameter MCL is calculated by the following formula:  $Pb < e^{(1.273 * [ln Hardness] - 4.705)}$ .
- Parameter MCL is calculated by the following formula:  $TAN < 2.5 * (0.8876 * ((0.0278 / (1 + 10^{(7.688 - pH)})) + (1.1994 / (1 + 10^{(pH - 7.688)}))) * 2.126 * 10^{(0.028 * (20 - temp))})$

**Table 7 - Surface Water Quality Standard Calculations  
Trail Ridge Landfill, Jacksonville, Florida  
February 2022**

| Parameter | Units | WQS Class I & Class III                   | SW-1           |     | SW-3           |      | SW-4           |     | SW-5           |     | SW-6           |     | SW-7           |     | SW-B           |     | Total Hardness <sup>1</sup><br>InH <sup>2</sup> |
|-----------|-------|---|----------------|-----|----------------|------|----------------|-----|----------------|-----|----------------|-----|----------------|-----|----------------|-----|---|
|           |       |   | 88             |     | 150            |      | 85             |     | 98             |     | 97             |     | 46             |     | NS             |     |   |
|           |       |   | 4.48           |     | 5.01           |      | 4.44           |     | 4.58           |     | 4.57           |     | 3.83           |     | NS             |     |   |
|           |       |   | Result (total) | Std | Result (total) | Std  | Result (total) | Std | Result (total) | Std | Result (total) | Std | Result (total) | Std | Result (total) | Std |   |
| Cadmium   | ug/L  | Measured $\leq e^{(0.7409[\ln H]-4.719)}$ | 0.5 U          | 0.2 | 0.5 U          | 0.4  | 0.5 U          | 0.2 | 0.5 U          | 0.3 | 0.5 U          | 0.3 | 0.5 U          | 0.2 | NS             | NS  |   |
| Chromium  | ug/L  | Measured $\leq e^{(0.819[\ln H]+0.6848)}$ | <b>9.2 I</b>   | 78  | <b>8.8 I</b>   | 120  | 5 U            | 75  | <b>6.4 I</b>   | 85  | <b>7.5 I</b>   | 84  | 5 U            | 46  | NS             | NS  |   |
| Copper    | ug/L  | Measured $\leq e^{(0.8545[\ln H]-1.702)}$ | 10 U           | 8.4 | 10 U           | 13.2 | 10 U           | 8.1 | 10 U           | 9.2 | 10 U           | 9.1 | 10 U           | 4.8 | NS             | NS  |   |
| Lead      | ug/L  | Measured $\leq e^{(1.273[\ln H]- 4.705)}$ | <b>4.9 I</b>   | 2.7 | <b>5.6 I</b>   | 5.3  | 3 U            | 2.6 | <b>4.1 I</b>   | 3.1 | <b>4.9 I</b>   | 3.1 | 3 U            | 1.2 | NS             | NS  |   |
| Nickel    | ug/L  | Measured $\leq e^{(0.846[\ln H]+0.0584)}$ | 10 U           | 47  | 10 U           | 74   | 10 U           | 45  | 10 U           | 51  | 10 U           | 51  | 10 U           | 27  | NS             | NS  |   |
| Zinc      | ug/L  | Measured $\leq e^{(0.8473[\ln H]+0.884)}$ | 50 U           | 108 | 50 U           | 169  | 50 U           | 104 | 50 U           | 118 | 60 I           | 117 | 50 U           | 62  | NS             | NS  |   |

**Notes:**

ug/L - micrograms per liter

WQS - Water Quality Standard, Class I (potable), Class III (freshwater) provided in FDEP Chapter 62-302

\*- According to FDEP Rule 62-302.530, if H is less than 25 than 25 shall be used in the calculations

<sup>1</sup> - Total hardness (H) is reported in mg/L of CaCO3 in the laboratory report

<sup>2</sup> - "ln H" means the natural logarithm of total hardness expressed as mg/L of CaCO3

I - result is qualified because the detection was between method detection limits and practical quantitation limits.

U - Not Detected.

Bold values indicate detections above the laboratory detection limit; yellow cells indicate result exceeded WQS.

<sup>NS</sup> - Not Sampled (Dry)

#### *4.3.2.1 Ammonia*

Ammonia was detected above the calculated Class III WQS 3.27 mg/L at surface water location SW-3 (8 mg/L). Ammonia is sporadically detected at these locations and may be an outlier. Ammonia will be closely monitored during future monitoring events to evaluate if there is a trend for ammonia concentrations.

#### *4.3.2.2 Dissolved Oxygen*

Dissolved oxygen was detected below the Class III WQS of greater than 5 mg/L at surface water locations SW-7 (4.2 mg/L). This concentration is consistent with historical data. Surface water points have historically been below this threshold on a sporadic basis.

## 5 DISCUSSION AND RECOMMENDATIONS

Except as noted, analyte detections and the exceedances observed during this event for both groundwater and surface water are consistent with historical conditions and/or background water quality.

The analytical results from analysis of the groundwater samples shows the following:

- The iron exceedances during the February 2022 sampling event were generally consistent with historical data. Based on this data, it appears that the presence of iron in the groundwater at most wells is not directly related to the landfill operations, but is related to the dissolution of naturally-occurring iron from the soil.
- The iron concentration at MWB-11I(R) was elevated above historical concentrations. The detection appears to be an outlier because leachate indicator parameters were steady. The iron concentration was an estimated value and therefore not a true exceedance.
- The FDEP PDWS for arsenic was exceeded at detection well MWB-12S. This concentration was not consistent with historical concentrations and the well was resampled. Arsenic was not detected above the PDWS during the resample event at MWB-12S. The result of the initial monitoring event was not confirmed.
- The FDEP PDWS for chromium was exceeded at detection well MWB-13S. This concentration was not consistent with historical concentrations and the well was resampled. Chromium was not detected above the PDWS during the resample event at MWB-13S. The result of the initial monitoring event was not confirmed.
- The FDEP SDWS for chloride was exceeded at detection well MWB-39S. This concentration was not consistent with historical concentrations and the well was resampled. Chloride was not detected above the SDWS during the resample event at MWB-39S. The result of the initial monitoring event was not confirmed.
- The FDEP SDWS for TDS was exceeded at detection wells MWB-21S, MWB-27S, MWB-34S, and MWB-39S.
  - The TDS concentration in MWB-34S continued an overall decreasing trend since 2017. The TDS exceedances at MWB-34S were attributed to a leachate release that occurred in January 2017 which was quickly repaired. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-34I in the same location, and thus the impacts remain contained to a small area.
  - The TDS concentration at MWB-39S was consistent with recent concentrations. Based on past results, a field evaluation was conducted during the 4<sup>th</sup> quarter of 2020 in the area of MWB-39S and MWB-40S. Two liquid seeps were discovered and repairs were made quickly. There is no evidence these seeps affected other wells at this time and no additional seeps were noted during the evaluation. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-39I in the same location as MWB-39S, and thus the impacts remain contained to a small area. TRL will continue to monitor MWB-39S and MWB-40S to ensure no other wells are impacted and concentrations decline.

- The FDEP SDWS range of 6.5 units to 8.5 units for pH was not met at background monitoring wells or detection monitoring wells during the first semi-annual 2022 sampling event. The low pH levels in select monitoring wells are attributed to Florida's ambient groundwater quality characteristics due to low pH rainfall, rapid recharge, and the limited buffering capability of Florida's sandy soils.
- The FDEP PDWS for benzene was exceeded at detection well MWB-39S. This concentration was not consistent with historical concentrations and the well was resampled. The concentration of benzene in the resample collected from MWB-39S during March 2022 is not considered to exceed the PDWS based on the rounding method described in FDEP Rounding Analytical Data for Site Rehabilitation Completion memorandum dated November 17, 2011. The result of the initial monitoring event was not confirmed.

The analytical results from analysis of the surface water samples shows the following:

- During this event, lead was detected above the calculated Class III WQS at surface water locations SW-6. The lead detection at SW-6 was an estimated concentration, therefore, this is not a true exceedance. Water quality at SW-6 remains generally good. Lead was not detected above the calculated Class III WQS in any other surface water sampling locations during this event.
- Ammonia was detected above the calculated Class III WQS at surface water location SW-3. Ammonia is sporadically detected at these locations and may be an outlier.
- Dissolved oxygen was detected below the Class III WQS at surface water location SW-7. These concentrations are consistent with historical data. Surface water points have historically been below this threshold on a sporadic basis.

Detection monitoring should continue as outlined in the WQMP. The next sampling event should be conducted prior to September 30, 2022, per the facility's permit and is currently scheduled for August 2022.

APPENDIX A  
LABORATORY ANALYTICAL RESULTS  
AND FIELD FORMS



Advanced Environmental Laboratories, Inc  
6681 Southpoint Pkwy Jacksonville, FL 32216  
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580  
Phone: (904) 363-9350  
Fax: (904) 363-9354

**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

March 09, 2022

Eric B. Fuller  
City of Jacksonville  
214 North Hogan Street  
10th Floor  
Jacksonville, FL 32202

RE: Workorder: J2202333 Trail Ridge Landfill

Dear Eric B. Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory between Friday February 18, 2022 and Tuesday February 22, 2022. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jerry Allen  
JAllen@aellab.com

### Certificate of Analysis

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID | Matrix | Method             | Date Collected   | Date Received    | Analytes Reported |
|-------------|-----------|--------|--------------------|------------------|------------------|-------------------|
| J2202333001 | MWB22S    | WA     | EPA 300.0          | 02/18/2022 08:10 | 02/18/2022 11:40 | 2                 |
| J2202333001 | MWB22S    | WA     | EPA 350.1          | 02/18/2022 08:10 | 02/18/2022 11:40 | 1                 |
| J2202333001 | MWB22S    | WA     | SM 2540 C          | 02/18/2022 08:10 | 02/18/2022 11:40 | 1                 |
| J2202333001 | MWB22S    | WA     | SW-846 6010        | 02/18/2022 08:10 | 02/18/2022 11:40 | 14                |
| J2202333001 | MWB22S    | WA     | SW-846 6020        | 02/18/2022 08:10 | 02/18/2022 11:40 | 3                 |
| J2202333001 | MWB22S    | WA     | SW-846 7470A       | 02/18/2022 08:10 | 02/18/2022 11:40 | 1                 |
| J2202333001 | MWB22S    | WA     | SW-846 8260B       | 02/18/2022 08:10 | 02/18/2022 11:40 | 45                |
| J2202333001 | MWB22S    | WA     | SW-846 8260B (SIM) | 02/18/2022 08:10 | 02/18/2022 11:40 | 2                 |
| J2202333002 | MWB12S    | WA     | EPA 300.0          | 02/18/2022 07:39 | 02/18/2022 11:40 | 2                 |
| J2202333002 | MWB12S    | WA     | EPA 350.1          | 02/18/2022 07:39 | 02/18/2022 11:40 | 1                 |
| J2202333002 | MWB12S    | WA     | SM 2540 C          | 02/18/2022 07:39 | 02/18/2022 11:40 | 1                 |
| J2202333002 | MWB12S    | WA     | SW-846 6010        | 02/18/2022 07:39 | 02/18/2022 11:40 | 14                |
| J2202333002 | MWB12S    | WA     | SW-846 6020        | 02/18/2022 07:39 | 02/18/2022 11:40 | 3                 |
| J2202333002 | MWB12S    | WA     | SW-846 7470A       | 02/18/2022 07:39 | 02/18/2022 11:40 | 1                 |
| J2202333002 | MWB12S    | WA     | SW-846 8260B       | 02/18/2022 07:39 | 02/18/2022 11:40 | 45                |
| J2202333002 | MWB12S    | WA     | SW-846 8260B (SIM) | 02/18/2022 07:39 | 02/18/2022 11:40 | 2                 |
| J2202333003 | MWB13S    | WA     | EPA 300.0          | 02/18/2022 08:38 | 02/18/2022 11:40 | 2                 |
| J2202333003 | MWB13S    | WA     | EPA 350.1          | 02/18/2022 08:38 | 02/18/2022 11:40 | 1                 |
| J2202333003 | MWB13S    | WA     | SM 2540 C          | 02/18/2022 08:38 | 02/18/2022 11:40 | 1                 |
| J2202333003 | MWB13S    | WA     | SW-846 6010        | 02/18/2022 08:38 | 02/18/2022 11:40 | 14                |
| J2202333003 | MWB13S    | WA     | SW-846 6020        | 02/18/2022 08:38 | 02/18/2022 11:40 | 3                 |
| J2202333003 | MWB13S    | WA     | SW-846 7470A       | 02/18/2022 08:38 | 02/18/2022 11:40 | 1                 |
| J2202333003 | MWB13S    | WA     | SW-846 8260B       | 02/18/2022 08:38 | 02/18/2022 11:40 | 45                |
| J2202333003 | MWB13S    | WA     | SW-846 8260B (SIM) | 02/18/2022 08:38 | 02/18/2022 11:40 | 2                 |
| J2202333004 | MWB27S    | WA     | EPA 300.0          | 02/18/2022 10:03 | 02/18/2022 11:40 | 2                 |
| J2202333004 | MWB27S    | WA     | EPA 350.1          | 02/18/2022 10:03 | 02/18/2022 11:40 | 1                 |
| J2202333004 | MWB27S    | WA     | SM 2540 C          | 02/18/2022 10:03 | 02/18/2022 11:40 | 1                 |
| J2202333004 | MWB27S    | WA     | SW-846 6010        | 02/18/2022 10:03 | 02/18/2022 11:40 | 14                |
| J2202333004 | MWB27S    | WA     | SW-846 6020        | 02/18/2022 10:03 | 02/18/2022 11:40 | 3                 |
| J2202333004 | MWB27S    | WA     | SW-846 7470A       | 02/18/2022 10:03 | 02/18/2022 11:40 | 1                 |
| J2202333004 | MWB27S    | WA     | SW-846 8260B       | 02/18/2022 10:03 | 02/18/2022 11:40 | 45                |
| J2202333004 | MWB27S    | WA     | SW-846 8260B (SIM) | 02/18/2022 10:03 | 02/18/2022 11:40 | 2                 |
| J2202333005 | MWB29S    | WA     | EPA 300.0          | 02/18/2022 10:59 | 02/18/2022 11:40 | 2                 |
| J2202333005 | MWB29S    | WA     | EPA 350.1          | 02/18/2022 10:59 | 02/18/2022 11:40 | 1                 |
| J2202333005 | MWB29S    | WA     | SM 2540 C          | 02/18/2022 10:59 | 02/18/2022 11:40 | 1                 |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID       | Matrix | Method             | Date Collected   | Date Received    | Analytes Reported |
|-------------|-----------------|--------|--------------------|------------------|------------------|-------------------|
| J2202333005 | MWB29S          | WA     | SW-846 6010        | 02/18/2022 10:59 | 02/18/2022 11:40 | 14                |
| J2202333005 | MWB29S          | WA     | SW-846 6020        | 02/18/2022 10:59 | 02/18/2022 11:40 | 3                 |
| J2202333005 | MWB29S          | WA     | SW-846 7470A       | 02/18/2022 10:59 | 02/18/2022 11:40 | 1                 |
| J2202333005 | MWB29S          | WA     | SW-846 8260B       | 02/18/2022 10:59 | 02/18/2022 11:40 | 45                |
| J2202333005 | MWB29S          | WA     | SW-846 8260B (SIM) | 02/18/2022 10:59 | 02/18/2022 11:40 | 2                 |
| J2202333006 | TRIP            | WA     | SW-846 8260B       | 02/18/2022 00:00 | 02/18/2022 11:40 | 45                |
| J2202333006 | TRIP            | WA     | SW-846 8260B (SIM) | 02/18/2022 00:00 | 02/18/2022 11:40 | 2                 |
| J2202333007 | MWB13I          | WA     | EPA 300.0          | 02/18/2022 09:07 | 02/18/2022 11:40 | 2                 |
| J2202333007 | MWB13I          | WA     | EPA 350.1          | 02/18/2022 09:07 | 02/18/2022 11:40 | 1                 |
| J2202333007 | MWB13I          | WA     | SM 2540 C          | 02/18/2022 09:07 | 02/18/2022 11:40 | 1                 |
| J2202333007 | MWB13I          | WA     | SW-846 6010        | 02/18/2022 09:07 | 02/18/2022 11:40 | 2                 |
| J2202333008 | MWB27I          | WA     | EPA 300.0          | 02/18/2022 09:36 | 02/18/2022 11:40 | 2                 |
| J2202333008 | MWB27I          | WA     | EPA 350.1          | 02/18/2022 09:36 | 02/18/2022 11:40 | 1                 |
| J2202333008 | MWB27I          | WA     | SM 2540 C          | 02/18/2022 09:36 | 02/18/2022 11:40 | 1                 |
| J2202333008 | MWB27I          | WA     | SW-846 6010        | 02/18/2022 09:36 | 02/18/2022 11:40 | 2                 |
| J2202333009 | MWB29I          | WA     | EPA 300.0          | 02/18/2022 10:31 | 02/18/2022 11:40 | 2                 |
| J2202333009 | MWB29I          | WA     | EPA 350.1          | 02/18/2022 10:31 | 02/18/2022 11:40 | 1                 |
| J2202333009 | MWB29I          | WA     | SM 2540 C          | 02/18/2022 10:31 | 02/18/2022 11:40 | 1                 |
| J2202333009 | MWB29I          | WA     | SW-846 6010        | 02/18/2022 10:31 | 02/18/2022 11:40 | 2                 |
| J2202333010 | MWB12I          | WA     | EPA 300.0          | 02/18/2022 07:11 | 02/18/2022 11:40 | 2                 |
| J2202333010 | MWB12I          | WA     | EPA 350.1          | 02/18/2022 07:11 | 02/18/2022 11:40 | 1                 |
| J2202333010 | MWB12I          | WA     | SM 2540 C          | 02/18/2022 07:11 | 02/18/2022 11:40 | 2                 |
| J2202333010 | MWB12I          | WA     | SW-846 6010        | 02/18/2022 07:11 | 02/18/2022 11:40 | 2                 |
| J2202333011 | EQUIPMENT BLANK | WA     | EPA 300.0          | 02/18/2022 11:05 | 02/18/2022 11:40 | 2                 |
| J2202333011 | EQUIPMENT BLANK | WA     | EPA 350.1          | 02/18/2022 11:05 | 02/18/2022 11:40 | 1                 |
| J2202333011 | EQUIPMENT BLANK | WA     | SM 2540 C          | 02/18/2022 11:05 | 02/18/2022 11:40 | 1                 |
| J2202333011 | EQUIPMENT BLANK | WA     | SW-846 6010        | 02/18/2022 11:05 | 02/18/2022 11:40 | 2                 |
| J2202333012 | MWB-35S         | WA     | EPA 300.0          | 02/21/2022 09:27 | 02/21/2022 15:15 | 2                 |
| J2202333012 | MWB-35S         | WA     | EPA 350.1          | 02/21/2022 09:27 | 02/21/2022 15:15 | 1                 |
| J2202333012 | MWB-35S         | WA     | SM 2540 C          | 02/21/2022 09:27 | 02/21/2022 15:15 | 1                 |
| J2202333012 | MWB-35S         | WA     | SW-846 6010        | 02/21/2022 09:27 | 02/21/2022 15:15 | 14                |
| J2202333012 | MWB-35S         | WA     | SW-846 6020        | 02/21/2022 09:27 | 02/21/2022 15:15 | 3                 |
| J2202333012 | MWB-35S         | WA     | SW-846 7470A       | 02/21/2022 09:27 | 02/21/2022 15:15 | 1                 |
| J2202333012 | MWB-35S         | WA     | SW-846 8260B       | 02/21/2022 09:27 | 02/21/2022 15:15 | 45                |
| J2202333012 | MWB-35S         | WA     | SW-846 8260B (SIM) | 02/21/2022 09:27 | 02/21/2022 15:15 | 2                 |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID | Matrix | Method             | Date Collected   | Date Received    | Analytes Reported |
|-------------|-----------|--------|--------------------|------------------|------------------|-------------------|
| J2202333013 | MWB-3S    | WA     | EPA 300.0          | 02/21/2022 08:11 | 02/21/2022 15:15 | 2                 |
| J2202333013 | MWB-3S    | WA     | EPA 350.1          | 02/21/2022 08:11 | 02/21/2022 15:15 | 1                 |
| J2202333013 | MWB-3S    | WA     | SM 2540 C          | 02/21/2022 08:11 | 02/21/2022 15:15 | 1                 |
| J2202333013 | MWB-3S    | WA     | SW-846 6010        | 02/21/2022 08:11 | 02/21/2022 15:15 | 14                |
| J2202333013 | MWB-3S    | WA     | SW-846 6020        | 02/21/2022 08:11 | 02/21/2022 15:15 | 3                 |
| J2202333013 | MWB-3S    | WA     | SW-846 7470A       | 02/21/2022 08:11 | 02/21/2022 15:15 | 1                 |
| J2202333013 | MWB-3S    | WA     | SW-846 8260B       | 02/21/2022 08:11 | 02/21/2022 15:15 | 45                |
| J2202333013 | MWB-3S    | WA     | SW-846 8260B (SIM) | 02/21/2022 08:11 | 02/21/2022 15:15 | 2                 |
| J2202333014 | MWB-2S    | WA     | EPA 300.0          | 02/21/2022 07:39 | 02/21/2022 15:15 | 2                 |
| J2202333014 | MWB-2S    | WA     | EPA 350.1          | 02/21/2022 07:39 | 02/21/2022 15:15 | 1                 |
| J2202333014 | MWB-2S    | WA     | SM 2540 C          | 02/21/2022 07:39 | 02/21/2022 15:15 | 1                 |
| J2202333014 | MWB-2S    | WA     | SW-846 6010        | 02/21/2022 07:39 | 02/21/2022 15:15 | 14                |
| J2202333014 | MWB-2S    | WA     | SW-846 6020        | 02/21/2022 07:39 | 02/21/2022 15:15 | 3                 |
| J2202333014 | MWB-2S    | WA     | SW-846 7470A       | 02/21/2022 07:39 | 02/21/2022 15:15 | 1                 |
| J2202333014 | MWB-2S    | WA     | SW-846 8260B       | 02/21/2022 07:39 | 02/21/2022 15:15 | 45                |
| J2202333014 | MWB-2S    | WA     | SW-846 8260B (SIM) | 02/21/2022 07:39 | 02/21/2022 15:15 | 2                 |
| J2202333015 | MWB-32S   | WA     | EPA 300.0          | 02/21/2022 10:59 | 02/21/2022 15:15 | 2                 |
| J2202333015 | MWB-32S   | WA     | EPA 350.1          | 02/21/2022 10:59 | 02/21/2022 15:15 | 1                 |
| J2202333015 | MWB-32S   | WA     | SM 2540 C          | 02/21/2022 10:59 | 02/21/2022 15:15 | 1                 |
| J2202333015 | MWB-32S   | WA     | SW-846 6010        | 02/21/2022 10:59 | 02/21/2022 15:15 | 14                |
| J2202333015 | MWB-32S   | WA     | SW-846 6020        | 02/21/2022 10:59 | 02/21/2022 15:15 | 3                 |
| J2202333015 | MWB-32S   | WA     | SW-846 7470A       | 02/21/2022 10:59 | 02/21/2022 15:15 | 1                 |
| J2202333015 | MWB-32S   | WA     | SW-846 8260B       | 02/21/2022 10:59 | 02/21/2022 15:15 | 45                |
| J2202333015 | MWB-32S   | WA     | SW-846 8260B (SIM) | 02/21/2022 10:59 | 02/21/2022 15:15 | 2                 |
| J2202333016 | MWB-33S   | WA     | EPA 300.0          | 02/21/2022 11:28 | 02/21/2022 15:15 | 2                 |
| J2202333016 | MWB-33S   | WA     | EPA 350.1          | 02/21/2022 11:28 | 02/21/2022 15:15 | 1                 |
| J2202333016 | MWB-33S   | WA     | SM 2540 C          | 02/21/2022 11:28 | 02/21/2022 15:15 | 1                 |
| J2202333016 | MWB-33S   | WA     | SW-846 6010        | 02/21/2022 11:28 | 02/21/2022 15:15 | 14                |
| J2202333016 | MWB-33S   | WA     | SW-846 6020        | 02/21/2022 11:28 | 02/21/2022 15:15 | 3                 |
| J2202333016 | MWB-33S   | WA     | SW-846 7470A       | 02/21/2022 11:28 | 02/21/2022 15:15 | 1                 |
| J2202333016 | MWB-33S   | WA     | SW-846 8260B       | 02/21/2022 11:28 | 02/21/2022 15:15 | 45                |
| J2202333016 | MWB-33S   | WA     | SW-846 8260B (SIM) | 02/21/2022 11:28 | 02/21/2022 15:15 | 2                 |
| J2202333017 | MWB-34S   | WA     | EPA 300.0          | 02/21/2022 11:59 | 02/21/2022 15:15 | 2                 |
| J2202333017 | MWB-34S   | WA     | EPA 350.1          | 02/21/2022 11:59 | 02/21/2022 15:15 | 1                 |
| J2202333017 | MWB-34S   | WA     | SM 2540 C          | 02/21/2022 11:59 | 02/21/2022 15:15 | 1                 |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID | Matrix | Method             | Date Collected   | Date Received    | Analytes Reported |
|-------------|-----------|--------|--------------------|------------------|------------------|-------------------|
| J2202333017 | MWB-34S   | WA     | SW-846 6010        | 02/21/2022 11:59 | 02/21/2022 15:15 | 14                |
| J2202333017 | MWB-34S   | WA     | SW-846 6020        | 02/21/2022 11:59 | 02/21/2022 15:15 | 3                 |
| J2202333017 | MWB-34S   | WA     | SW-846 7470A       | 02/21/2022 11:59 | 02/21/2022 15:15 | 1                 |
| J2202333017 | MWB-34S   | WA     | SW-846 8260B       | 02/21/2022 11:59 | 02/21/2022 15:15 | 45                |
| J2202333017 | MWB-34S   | WA     | SW-846 8260B (SIM) | 02/21/2022 11:59 | 02/21/2022 15:15 | 2                 |
| J2202333018 | MWB-39S   | WA     | EPA 300.0          | 02/21/2022 12:58 | 02/21/2022 15:15 | 2                 |
| J2202333018 | MWB-39S   | WA     | EPA 350.1          | 02/21/2022 12:58 | 02/21/2022 15:15 | 1                 |
| J2202333018 | MWB-39S   | WA     | SM 2540 C          | 02/21/2022 12:58 | 02/21/2022 15:15 | 1                 |
| J2202333018 | MWB-39S   | WA     | SW-846 6010        | 02/21/2022 12:58 | 02/21/2022 15:15 | 14                |
| J2202333018 | MWB-39S   | WA     | SW-846 6020        | 02/21/2022 12:58 | 02/21/2022 15:15 | 3                 |
| J2202333018 | MWB-39S   | WA     | SW-846 7470A       | 02/21/2022 12:58 | 02/21/2022 15:15 | 1                 |
| J2202333018 | MWB-39S   | WA     | SW-846 8260B       | 02/21/2022 12:58 | 02/21/2022 15:15 | 45                |
| J2202333018 | MWB-39S   | WA     | SW-846 8260B (SIM) | 02/21/2022 12:58 | 02/21/2022 15:15 | 2                 |
| J2202333019 | MWB-40S   | WA     | EPA 300.0          | 02/21/2022 13:28 | 02/21/2022 15:15 | 2                 |
| J2202333019 | MWB-40S   | WA     | EPA 350.1          | 02/21/2022 13:28 | 02/21/2022 15:15 | 1                 |
| J2202333019 | MWB-40S   | WA     | SM 2540 C          | 02/21/2022 13:28 | 02/21/2022 15:15 | 1                 |
| J2202333019 | MWB-40S   | WA     | SW-846 6010        | 02/21/2022 13:28 | 02/21/2022 15:15 | 14                |
| J2202333019 | MWB-40S   | WA     | SW-846 6020        | 02/21/2022 13:28 | 02/21/2022 15:15 | 3                 |
| J2202333019 | MWB-40S   | WA     | SW-846 7470A       | 02/21/2022 13:28 | 02/21/2022 15:15 | 1                 |
| J2202333019 | MWB-40S   | WA     | SW-846 8260B       | 02/21/2022 13:28 | 02/21/2022 15:15 | 45                |
| J2202333019 | MWB-40S   | WA     | SW-846 8260B (SIM) | 02/21/2022 13:28 | 02/21/2022 15:15 | 2                 |
| J2202333020 | MWB-21S   | WA     | EPA 300.0          | 02/21/2022 14:29 | 02/21/2022 15:15 | 2                 |
| J2202333020 | MWB-21S   | WA     | EPA 350.1          | 02/21/2022 14:29 | 02/21/2022 15:15 | 1                 |
| J2202333020 | MWB-21S   | WA     | SM 2540 C          | 02/21/2022 14:29 | 02/21/2022 15:15 | 1                 |
| J2202333020 | MWB-21S   | WA     | SW-846 6010        | 02/21/2022 14:29 | 02/21/2022 15:15 | 14                |
| J2202333020 | MWB-21S   | WA     | SW-846 6020        | 02/21/2022 14:29 | 02/21/2022 15:15 | 3                 |
| J2202333020 | MWB-21S   | WA     | SW-846 7470A       | 02/21/2022 14:29 | 02/21/2022 15:15 | 1                 |
| J2202333020 | MWB-21S   | WA     | SW-846 8260B       | 02/21/2022 14:29 | 02/21/2022 15:15 | 45                |
| J2202333020 | MWB-21S   | WA     | SW-846 8260B (SIM) | 02/21/2022 14:29 | 02/21/2022 15:15 | 2                 |
| J2202333021 | MWB-20S   | WA     | EPA 300.0          | 02/21/2022 13:59 | 02/21/2022 15:15 | 2                 |
| J2202333021 | MWB-20S   | WA     | EPA 350.1          | 02/21/2022 13:59 | 02/21/2022 15:15 | 1                 |
| J2202333021 | MWB-20S   | WA     | SM 2540 C          | 02/21/2022 13:59 | 02/21/2022 15:15 | 1                 |
| J2202333021 | MWB-20S   | WA     | SW-846 6010        | 02/21/2022 13:59 | 02/21/2022 15:15 | 14                |
| J2202333021 | MWB-20S   | WA     | SW-846 6020        | 02/21/2022 13:59 | 02/21/2022 15:15 | 3                 |
| J2202333021 | MWB-20S   | WA     | SW-846 7470A       | 02/21/2022 13:59 | 02/21/2022 15:15 | 1                 |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID    | Matrix | Method                        | Date Collected   | Date Received    | Analytes Reported |
|-------------|--------------|--------|-------------------------------|------------------|------------------|-------------------|
| J2202333021 | MWB-20S      | WA     | SW-846 8260B                  | 02/21/2022 13:59 | 02/21/2022 15:15 | 45                |
| J2202333021 | MWB-20S      | WA     | SW-846 8260B (SIM)            | 02/21/2022 13:59 | 02/21/2022 15:15 | 2                 |
| J2202333022 | TRIP BLANK 2 | WA     | SW-846 8260B                  | 02/21/2022 00:00 | 02/21/2022 15:15 | 45                |
| J2202333022 | TRIP BLANK 2 | WA     | SW-846 8260B (SIM)            | 02/21/2022 00:00 | 02/21/2022 15:15 | 2                 |
| J2202333023 | MWB-2I       | WA     | EPA 300.0                     | 02/21/2022 07:11 | 02/21/2022 15:15 | 2                 |
| J2202333023 | MWB-2I       | WA     | EPA 350.1                     | 02/21/2022 07:11 | 02/21/2022 15:15 | 1                 |
| J2202333023 | MWB-2I       | WA     | SM 2540 C                     | 02/21/2022 07:11 | 02/21/2022 15:15 | 1                 |
| J2202333023 | MWB-2I       | WA     | SW-846 6010                   | 02/21/2022 07:11 | 02/21/2022 15:15 | 2                 |
| J2202333024 | MWB-3I       | WA     | EPA 300.0                     | 02/21/2022 08:41 | 02/21/2022 15:15 | 2                 |
| J2202333024 | MWB-3I       | WA     | EPA 350.1                     | 02/21/2022 08:41 | 02/21/2022 15:15 | 1                 |
| J2202333024 | MWB-3I       | WA     | SM 2540 C                     | 02/21/2022 08:41 | 02/21/2022 15:15 | 1                 |
| J2202333024 | MWB-3I       | WA     | SW-846 6010                   | 02/21/2022 08:41 | 02/21/2022 15:15 | 2                 |
| J2202333025 | MWB-35I      | WA     | EPA 300.0                     | 02/21/2022 09:55 | 02/21/2022 15:15 | 2                 |
| J2202333025 | MWB-35I      | WA     | EPA 350.1                     | 02/21/2022 09:55 | 02/21/2022 15:15 | 1                 |
| J2202333025 | MWB-35I      | WA     | SM 2540 C                     | 02/21/2022 09:55 | 02/21/2022 15:15 | 1                 |
| J2202333025 | MWB-35I      | WA     | SW-846 6010                   | 02/21/2022 09:55 | 02/21/2022 15:15 | 2                 |
| J2202333026 | MWB-32I      | WA     | EPA 300.0                     | 02/21/2022 10:24 | 02/21/2022 15:15 | 2                 |
| J2202333026 | MWB-32I      | WA     | EPA 350.1                     | 02/21/2022 10:24 | 02/21/2022 15:15 | 1                 |
| J2202333026 | MWB-32I      | WA     | SM 2540 C                     | 02/21/2022 10:24 | 02/21/2022 15:15 | 1                 |
| J2202333026 | MWB-32I      | WA     | SW-846 6010                   | 02/21/2022 10:24 | 02/21/2022 15:15 | 2                 |
| J2202333027 | MWB-34I      | WA     | EPA 300.0                     | 02/21/2022 12:28 | 02/21/2022 15:15 | 2                 |
| J2202333027 | MWB-34I      | WA     | EPA 350.1                     | 02/21/2022 12:28 | 02/21/2022 15:15 | 1                 |
| J2202333027 | MWB-34I      | WA     | SM 2540 C                     | 02/21/2022 12:28 | 02/21/2022 15:15 | 1                 |
| J2202333027 | MWB-34I      | WA     | SW-846 6010                   | 02/21/2022 12:28 | 02/21/2022 15:15 | 2                 |
| J2202333028 | SW-5         | WA     | COLILERT-18 (Fecal Coliforms) | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5         | WA     | Calculation                   | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5         | WA     | DEP SOP 10/03/83              | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5         | WA     | EPA 245.1                     | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5         | WA     | EPA 300.0                     | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5         | WA     | EPA 350.1                     | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5         | WA     | EPA 351.2                     | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5         | WA     | EPA 365.4                     | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5         | WA     | EPA 410.4                     | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5         | WA     | Field Measurements            | 02/22/2022 07:05 | 02/22/2022 10:10 | 2                 |
| J2202333028 | SW-5         | WA     | SM 10200 H                    | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID | Matrix | Method                        | Date Collected   | Date Received    | Analytes Reported |
|-------------|-----------|--------|-------------------------------|------------------|------------------|-------------------|
| J2202333028 | SW-5      | WA     | SM 2540 C                     | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5      | WA     | SM 2540D                      | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5      | WA     | SM 4500NO3-F                  | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5      | WA     | SM 5210B                      | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5      | WA     | SM 5310B                      | 02/22/2022 07:05 | 02/22/2022 10:10 | 1                 |
| J2202333028 | SW-5      | WA     | SW-846 6010                   | 02/22/2022 07:05 | 02/22/2022 10:10 | 16                |
| J2202333028 | SW-5      | WA     | SW-846 6020                   | 02/22/2022 07:05 | 02/22/2022 10:10 | 3                 |
| J2202333028 | SW-5      | WA     | SW-846 8260B                  | 02/22/2022 07:05 | 02/22/2022 10:10 | 45                |
| J2202333028 | SW-5      | WA     | SW-846 8260B (SIM)            | 02/22/2022 07:05 | 02/22/2022 10:10 | 2                 |
| J2202333029 | SW-6      | WA     | COLILERT-18 (Fecal Coliforms) | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | Calculation                   | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | DEP SOP 10/03/83              | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | EPA 245.1                     | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | EPA 300.0                     | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | EPA 350.1                     | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | EPA 351.2                     | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | EPA 365.4                     | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | EPA 410.4                     | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | Field Measurements            | 02/22/2022 06:50 | 02/22/2022 10:10 | 2                 |
| J2202333029 | SW-6      | WA     | SM 10200 H                    | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | SM 2540 C                     | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | SM 2540D                      | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | SM 4500NO3-F                  | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | SM 5210B                      | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | SM 5310B                      | 02/22/2022 06:50 | 02/22/2022 10:10 | 1                 |
| J2202333029 | SW-6      | WA     | SW-846 6010                   | 02/22/2022 06:50 | 02/22/2022 10:10 | 16                |
| J2202333029 | SW-6      | WA     | SW-846 6020                   | 02/22/2022 06:50 | 02/22/2022 10:10 | 3                 |
| J2202333029 | SW-6      | WA     | SW-846 8260B                  | 02/22/2022 06:50 | 02/22/2022 10:10 | 45                |
| J2202333029 | SW-6      | WA     | SW-846 8260B (SIM)            | 02/22/2022 06:50 | 02/22/2022 10:10 | 2                 |
| J2202333030 | SW-7      | WA     | COLILERT-18 (Fecal Coliforms) | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | Calculation                   | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | DEP SOP 10/03/83              | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | EPA 245.1                     | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | EPA 300.0                     | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | EPA 350.1                     | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID | Matrix | Method                        | Date Collected   | Date Received    | Analytes Reported |
|-------------|-----------|--------|-------------------------------|------------------|------------------|-------------------|
| J2202333030 | SW-7      | WA     | EPA 351.2                     | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | EPA 365.4                     | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | EPA 410.4                     | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | Field Measurements            | 02/22/2022 07:25 | 02/22/2022 10:10 | 2                 |
| J2202333030 | SW-7      | WA     | SM 10200 H                    | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | SM 2540 C                     | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | SM 2540D                      | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | SM 4500NO3-F                  | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | SM 5210B                      | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | SM 5310B                      | 02/22/2022 07:25 | 02/22/2022 10:10 | 1                 |
| J2202333030 | SW-7      | WA     | SW-846 6010                   | 02/22/2022 07:25 | 02/22/2022 10:10 | 16                |
| J2202333030 | SW-7      | WA     | SW-846 6020                   | 02/22/2022 07:25 | 02/22/2022 10:10 | 3                 |
| J2202333030 | SW-7      | WA     | SW-846 8260B                  | 02/22/2022 07:25 | 02/22/2022 10:10 | 45                |
| J2202333030 | SW-7      | WA     | SW-846 8260B (SIM)            | 02/22/2022 07:25 | 02/22/2022 10:10 | 2                 |
| J2202333031 | SW-4      | WA     | COLILERT-18 (Fecal Coliforms) | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | Calculation                   | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | DEP SOP 10/03/83              | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | EPA 245.1                     | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | EPA 300.0                     | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | EPA 350.1                     | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | EPA 351.2                     | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | EPA 365.4                     | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | EPA 410.4                     | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | Field Measurements            | 02/22/2022 07:50 | 02/22/2022 10:10 | 2                 |
| J2202333031 | SW-4      | WA     | SM 10200 H                    | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | SM 2540 C                     | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | SM 2540D                      | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | SM 4500NO3-F                  | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | SM 5210B                      | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | SM 5310B                      | 02/22/2022 07:50 | 02/22/2022 10:10 | 1                 |
| J2202333031 | SW-4      | WA     | SW-846 6010                   | 02/22/2022 07:50 | 02/22/2022 10:10 | 16                |
| J2202333031 | SW-4      | WA     | SW-846 6020                   | 02/22/2022 07:50 | 02/22/2022 10:10 | 3                 |
| J2202333031 | SW-4      | WA     | SW-846 8260B                  | 02/22/2022 07:50 | 02/22/2022 10:10 | 45                |
| J2202333031 | SW-4      | WA     | SW-846 8260B (SIM)            | 02/22/2022 07:50 | 02/22/2022 10:10 | 2                 |
| J2202333032 | SW-3      | WA     | COLILERT-18 (Fecal Coliforms) | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID | Matrix | Method                        | Date Collected   | Date Received    | Analytes Reported |
|-------------|-----------|--------|-------------------------------|------------------|------------------|-------------------|
| J2202333032 | SW-3      | WA     | Calculation                   | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | DEP SOP 10/03/83              | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | EPA 245.1                     | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | EPA 300.0                     | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | EPA 350.1                     | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | EPA 351.2                     | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | EPA 365.4                     | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | EPA 410.4                     | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | Field Measurements            | 02/22/2022 08:20 | 02/22/2022 10:10 | 2                 |
| J2202333032 | SW-3      | WA     | SM 10200 H                    | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | SM 2540 C                     | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | SM 2540D                      | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | SM 4500NO3-F                  | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | SM 5210B                      | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | SM 5310B                      | 02/22/2022 08:20 | 02/22/2022 10:10 | 1                 |
| J2202333032 | SW-3      | WA     | SW-846 6010                   | 02/22/2022 08:20 | 02/22/2022 10:10 | 16                |
| J2202333032 | SW-3      | WA     | SW-846 6020                   | 02/22/2022 08:20 | 02/22/2022 10:10 | 3                 |
| J2202333032 | SW-3      | WA     | SW-846 8260B                  | 02/22/2022 08:20 | 02/22/2022 10:10 | 45                |
| J2202333032 | SW-3      | WA     | SW-846 8260B (SIM)            | 02/22/2022 08:20 | 02/22/2022 10:10 | 2                 |
| J2202333033 | SW-1      | WA     | COLILERT-18 (Fecal Coliforms) | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | Calculation                   | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | DEP SOP 10/03/83              | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | EPA 245.1                     | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | EPA 300.0                     | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | EPA 350.1                     | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | EPA 351.2                     | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | EPA 365.4                     | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | EPA 410.4                     | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | Field Measurements            | 02/22/2022 09:00 | 02/22/2022 10:10 | 2                 |
| J2202333033 | SW-1      | WA     | SM 10200 H                    | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | SM 2540 C                     | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | SM 2540D                      | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | SM 4500NO3-F                  | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | SM 5210B                      | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |
| J2202333033 | SW-1      | WA     | SM 5310B                      | 02/22/2022 09:00 | 02/22/2022 10:10 | 1                 |

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**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID         | Matrix | Method             | Date Collected   | Date Received    | Analytes Reported |
|-------------|-------------------|--------|--------------------|------------------|------------------|-------------------|
| J2202333033 | SW-1              | WA     | SW-846 6010        | 02/22/2022 09:00 | 02/22/2022 10:10 | 16                |
| J2202333033 | SW-1              | WA     | SW-846 6020        | 02/22/2022 09:00 | 02/22/2022 10:10 | 3                 |
| J2202333033 | SW-1              | WA     | SW-846 8260B       | 02/22/2022 09:00 | 02/22/2022 10:10 | 45                |
| J2202333033 | SW-1              | WA     | SW-846 8260B (SIM) | 02/22/2022 09:00 | 02/22/2022 10:10 | 2                 |
| J2202333034 | Trip Blank 1      | WA     | SW-846 8260B       | 02/22/2022 00:00 | 02/22/2022 10:10 | 45                |
| J2202333034 | Trip Blank 1      | WA     | SW-846 8260B (SIM) | 02/22/2022 00:00 | 02/22/2022 10:10 | 2                 |
| J2202333035 | EQUIPMENT BLANK 2 | WA     | EPA 300.0          | 02/21/2022 17:30 | 02/22/2022 10:10 | 2                 |
| J2202333035 | EQUIPMENT BLANK 2 | WA     | EPA 350.1          | 02/21/2022 17:30 | 02/22/2022 10:10 | 1                 |
| J2202333035 | EQUIPMENT BLANK 2 | WA     | SM 2540 C          | 02/21/2022 17:30 | 02/22/2022 10:10 | 1                 |
| J2202333035 | EQUIPMENT BLANK 2 | WA     | SW-846 6010        | 02/21/2022 17:30 | 02/22/2022 10:10 | 14                |
| J2202333035 | EQUIPMENT BLANK 2 | WA     | SW-846 6020        | 02/21/2022 17:30 | 02/22/2022 10:10 | 3                 |
| J2202333035 | EQUIPMENT BLANK 2 | WA     | SW-846 7470A       | 02/21/2022 17:30 | 02/22/2022 10:10 | 1                 |
| J2202333035 | EQUIPMENT BLANK 2 | WA     | SW-846 8260B       | 02/21/2022 17:30 | 02/22/2022 10:10 | 45                |
| J2202333035 | EQUIPMENT BLANK 2 | WA     | SW-846 8260B (SIM) | 02/21/2022 17:30 | 02/22/2022 10:10 | 2                 |
| J2202333036 | SGMW-1SR          | WA     | EPA 300.0          | 02/21/2022 16:39 | 02/22/2022 10:10 | 2                 |
| J2202333036 | SGMW-1SR          | WA     | EPA 350.1          | 02/21/2022 16:39 | 02/22/2022 10:10 | 1                 |
| J2202333036 | SGMW-1SR          | WA     | SM 2540 C          | 02/21/2022 16:39 | 02/22/2022 10:10 | 1                 |
| J2202333036 | SGMW-1SR          | WA     | SW-846 6010        | 02/21/2022 16:39 | 02/22/2022 10:10 | 14                |
| J2202333036 | SGMW-1SR          | WA     | SW-846 6020        | 02/21/2022 16:39 | 02/22/2022 10:10 | 3                 |
| J2202333036 | SGMW-1SR          | WA     | SW-846 7470A       | 02/21/2022 16:39 | 02/22/2022 10:10 | 1                 |
| J2202333036 | SGMW-1SR          | WA     | SW-846 8260B       | 02/21/2022 16:39 | 02/22/2022 10:10 | 45                |
| J2202333036 | SGMW-1SR          | WA     | SW-846 8260B (SIM) | 02/21/2022 16:39 | 02/22/2022 10:10 | 2                 |
| J2202333037 | SGMW-2S           | WA     | EPA 300.0          | 02/21/2022 16:04 | 02/22/2022 10:10 | 2                 |
| J2202333037 | SGMW-2S           | WA     | EPA 350.1          | 02/21/2022 16:04 | 02/22/2022 10:10 | 1                 |
| J2202333037 | SGMW-2S           | WA     | SM 2540 C          | 02/21/2022 16:04 | 02/22/2022 10:10 | 1                 |
| J2202333037 | SGMW-2S           | WA     | SW-846 6010        | 02/21/2022 16:04 | 02/22/2022 10:10 | 14                |
| J2202333037 | SGMW-2S           | WA     | SW-846 6020        | 02/21/2022 16:04 | 02/22/2022 10:10 | 3                 |
| J2202333037 | SGMW-2S           | WA     | SW-846 7470A       | 02/21/2022 16:04 | 02/22/2022 10:10 | 1                 |
| J2202333037 | SGMW-2S           | WA     | SW-846 8260B       | 02/21/2022 16:04 | 02/22/2022 10:10 | 45                |
| J2202333037 | SGMW-2S           | WA     | SW-846 8260B (SIM) | 02/21/2022 16:04 | 02/22/2022 10:10 | 2                 |
| J2202333038 | MWB-11S           | WA     | EPA 300.0          | 02/21/2022 15:33 | 02/22/2022 10:10 | 2                 |
| J2202333038 | MWB-11S           | WA     | EPA 350.1          | 02/21/2022 15:33 | 02/22/2022 10:10 | 1                 |
| J2202333038 | MWB-11S           | WA     | SM 2540 C          | 02/21/2022 15:33 | 02/22/2022 10:10 | 1                 |
| J2202333038 | MWB-11S           | WA     | SW-846 6010        | 02/21/2022 15:33 | 02/22/2022 10:10 | 14                |
| J2202333038 | MWB-11S           | WA     | SW-846 6020        | 02/21/2022 15:33 | 02/22/2022 10:10 | 3                 |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Sample Summary**

| Lab ID      | Sample ID    | Matrix | Method             | Date Collected   | Date Received    | Analytes Reported |
|-------------|--------------|--------|--------------------|------------------|------------------|-------------------|
| J2202333038 | MWB-11S      | WA     | SW-846 7470A       | 02/21/2022 15:33 | 02/22/2022 10:10 | 1                 |
| J2202333038 | MWB-11S      | WA     | SW-846 8260B       | 02/21/2022 15:33 | 02/22/2022 10:10 | 45                |
| J2202333038 | MWB-11S      | WA     | SW-846 8260B (SIM) | 02/21/2022 15:33 | 02/22/2022 10:10 | 2                 |
| J2202333039 | TRIP BLANK 3 | WA     | SW-846 8260B       | 02/21/2022 00:00 | 02/22/2022 10:10 | 45                |
| J2202333039 | TRIP BLANK 3 | WA     | SW-846 8260B (SIM) | 02/21/2022 00:00 | 02/22/2022 10:10 | 2                 |
| J2202333040 | MWB39I       | WA     | EPA 300.0          | 02/21/2022 17:14 | 02/22/2022 10:10 | 2                 |
| J2202333040 | MWB39I       | WA     | EPA 350.1          | 02/21/2022 17:14 | 02/22/2022 10:10 | 1                 |
| J2202333040 | MWB39I       | WA     | SM 2540 C          | 02/21/2022 17:14 | 02/22/2022 10:10 | 1                 |
| J2202333040 | MWB39I       | WA     | SW-846 6010        | 02/21/2022 17:14 | 02/22/2022 10:10 | 2                 |
| J2202333041 | MWB11I(R)    | WA     | EPA 300.0          | 02/21/2022 15:07 | 02/22/2022 10:10 | 2                 |
| J2202333041 | MWB11I(R)    | WA     | EPA 350.1          | 02/21/2022 15:07 | 02/22/2022 10:10 | 1                 |
| J2202333041 | MWB11I(R)    | WA     | SM 2540 C          | 02/21/2022 15:07 | 02/22/2022 10:10 | 1                 |
| J2202333041 | MWB11I(R)    | WA     | SW-846 6010        | 02/21/2022 15:07 | 02/22/2022 10:10 | 2                 |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

## Analytical Results Qualifiers

### Parameter Qualifiers

- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J3 Lab QC Failure
- CN See Case Narration
- J4 Estimated Result
- J4 Estimated Result
- Q Missed Hold Time

### Lab Qualifiers

- G DOH Certification #E82001 (FL NELAC) AEL-Gainesville
- J DOH Certification #E82574 (FL NELAC) AEL-Jacksonville

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333001      **Date Collected:** 02/18/2022 08:10      **Matrix:** Water  
**Sample ID:** MWB22S      **Date Received:** 02/18/2022 11:40

| Parameter  | Results         | Units | PQL    | MDL     | DF | Prepared         | Analyzed         | Lab |
|--|-----------------|-------|--------|---------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                 |       |        |         |    |                  |                  |     |
| Arsenic  | 0.0080 U        | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/24/2022 12:11 | J   |
| Barium   | 0.0030 U        | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Beryllium  | 0.0020 U        | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Cadmium  | 0.00050 U       | mg/L  | 0.0020 | 0.00050 | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Chromium   | 0.0050 U        | mg/L  | 0.020  | 0.0050  | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Cobalt   | 0.0010 U        | mg/L  | 0.0040 | 0.0010  | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Copper   | 0.010 U         | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Iron   | 200 U           | ug/L  | 800    | 200     | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Lead   | 0.0030 U        | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Nickel   | 0.010 U         | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Silver   | 0.0080 U        | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Sodium   | <b>93</b>       | mg/L  | 3.2    | 0.80    | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Vanadium   | <b>0.0057 I</b> | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| Zinc   | 0.050 U         | mg/L  | 0.20   | 0.050   | 1  | 02/23/2022 03:21 | 02/23/2022 15:33 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                 |       |        |         |    |                  |                  |     |
| Antimony   | 1.0 U           | ug/L  | 4.0    | 1.0     | 1  | 02/22/2022 07:00 | 02/22/2022 16:53 | J   |
| Selenium   | 1.2 U           | ug/L  | 5.0    | 1.2     | 1  | 02/22/2022 07:00 | 02/22/2022 16:53 | J   |
| Thallium   | 0.25 U          | ug/L  | 1.0    | 0.25    | 1  | 02/22/2022 07:00 | 02/22/2022 16:53 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                 |       |        |         |    |                  |                  |     |
| Mercury  | 0.011 U         | ug/L  | 0.10   | 0.011   | 1  | 03/02/2022 12:22 | 03/02/2022 17:20 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                 |       |        |         |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U         | ug/L  | 0.20   | 0.050   | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U         | ug/L  | 0.10   | 0.019   | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                 |       |        |         |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U          | ug/L  | 1.0    | 0.25    | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U          | ug/L  | 2.0    | 0.50    | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U          | ug/L  | 1.0    | 0.20    | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333001      **Date Collected:** 02/18/2022 08:10      **Matrix:** Water  
**Sample ID:** MWB22S      **Date Received:** 02/18/2022 11:40

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 12:56 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                        | Results | Units | PQL                                     | MDL  | DF | Prepared             | Analyzed         | Lab |
|----------------------------------|---------|-------|---|------|----|----------------------|------------------|-----|
| <b>Lab ID:</b> J2202333001       |         |       | <b>Date Collected:</b> 02/18/2022 08:10 |      |    | <b>Matrix:</b> Water |                  |     |
| <b>Sample ID:</b> MWB22S         |         |       | <b>Date Received:</b> 02/18/2022 11:40  |      |    |                      |                  |     |
| Iodomethane (Methyl Iodide)      | 0.50 U  | ug/L  | 2.0                                     | 0.50 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| Methylene Chloride               | 1.2 U   | ug/L  | 5.0                                     | 1.2  | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| Styrene                          | 0.50 U  | ug/L  | 2.0                                     | 0.50 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U  | ug/L  | 1.0                                     | 0.25 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| Toluene                          | 0.25 U  | ug/L  | 1.0                                     | 0.25 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| Trichloroethene                  | 0.25 U  | ug/L  | 1.0                                     | 0.25 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| Trichlorofluoromethane           | 0.50 U  | ug/L  | 2.0                                     | 0.50 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| Vinyl Acetate                    | 0.50 U  | ug/L  | 2.0                                     | 0.50 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| Vinyl Chloride                   | 0.25 U  | ug/L  | 1.0                                     | 0.25 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| Xylene (Total)                   | 0.75 U  | ug/L  | 3.0                                     | 0.75 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U  | ug/L  | 2.0                                     | 0.50 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| cis-1,3-Dichloropropene          | 0.20 U  | ug/L  | 1.0                                     | 0.20 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U  | ug/L  | 2.0                                     | 0.50 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U  | ug/L  | 1.0                                     | 0.20 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U  | ug/L  | 2.0                                     | 0.50 | 1  | 02/21/2022 08:35     | 02/21/2022 12:56 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |         |       |   |      |    |                      |                  |     |
| Chloride                         | 120     | mg/L  | 16                                      | 4.0  | 2  | 02/19/2022 06:46     | 02/19/2022 06:46 | J   |
| Nitrate (as N)                   | 0.40 U  | mg/L  | 1.6                                     | 0.40 | 2  | 02/19/2022 06:46     | 02/19/2022 06:46 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |         |       |   |      |    |                      |                  |     |
| Ammonia (N)                      | 0.06    | mg/L  | 0.04                                    | 0.02 | 1  | 02/21/2022 13:05     | 02/21/2022 13:05 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |         |       |   |      |    |                      |                  |     |
| Total Dissolved Solids           | 463     | mg/L  | 10                                      | 10   | 1  | 02/24/2022 10:19     | 02/24/2022 10:19 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 100            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 109            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 105            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333002      **Date Collected:** 02/18/2022 07:39      **Matrix:** Water  
**Sample ID:** MWB12S      **Date Received:** 02/18/2022 11:40

| Parameter  | Results   | Units | PQL    | MDL     | DF | Prepared         | Analyzed         | Lab |
|--|-----------|-------|--------|---------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |           |       |        |         |    |                  |                  |     |
| Arsenic  | 0.017 I   | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/24/2022 12:16 | J   |
| Barium   | 0.0030 U  | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Beryllium  | 0.0020 U  | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Cadmium  | 0.00050 U | mg/L  | 0.0020 | 0.00050 | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Chromium   | 0.0050 U  | mg/L  | 0.020  | 0.0050  | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Cobalt   | 0.0010 U  | mg/L  | 0.0040 | 0.0010  | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Copper   | 0.010 U   | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Iron   | 200 U     | ug/L  | 800    | 200     | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Lead   | 0.0030 U  | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Nickel   | 0.010 U   | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Silver   | 0.0080 U  | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Sodium   | 12        | mg/L  | 3.2    | 0.80    | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Vanadium   | 0.030     | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| Zinc   | 0.050 U   | mg/L  | 0.20   | 0.050   | 1  | 02/23/2022 03:21 | 02/23/2022 15:46 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |           |       |        |         |    |                  |                  |     |
| Antimony   | 1.0 U     | ug/L  | 4.0    | 1.0     | 1  | 02/22/2022 07:00 | 02/22/2022 17:11 | J   |
| Selenium   | 5.5       | ug/L  | 5.0    | 1.2     | 1  | 02/22/2022 07:00 | 02/22/2022 17:11 | J   |
| Thallium   | 0.25 U    | ug/L  | 1.0    | 0.25    | 1  | 02/22/2022 07:00 | 02/22/2022 17:11 | J   |
| <b>METALS (SW-846 7470A)</b>                       |           |       |        |         |    |                  |                  |     |
| Mercury  | 0.011 U   | ug/L  | 0.10   | 0.011   | 1  | 03/02/2022 12:22 | 03/02/2022 17:24 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |           |       |        |         |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U   | ug/L  | 0.20   | 0.050   | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U   | ug/L  | 0.10   | 0.019   | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |           |       |        |         |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U    | ug/L  | 1.0    | 0.25    | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U    | ug/L  | 2.0    | 0.50    | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U    | ug/L  | 1.0    | 0.20    | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |

Lab ID: J2202333002  
 Sample ID: MWB12S

Date Collected: 02/18/2022 07:39  
 Date Received: 02/18/2022 11:40

Matrix: Water





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333002      **Date Collected:** 02/18/2022 07:39      **Matrix:** Water  
**Sample ID:** MWB12S      **Date Received:** 02/18/2022 11:40

| Parameter                        | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Methylene Chloride               | 1.2 U   | ug/L  | 5.0  | 1.2  | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Styrene                          | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Toluene                          | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Trichloroethene                  | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Trichlorofluoromethane           | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Vinyl Acetate                    | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Vinyl Chloride                   | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| Xylene (Total)                   | 0.75 U  | ug/L  | 3.0  | 0.75 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| cis-1,3-Dichloropropene          | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:20 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |         |       |      |      |    |                  |                  |     |
| Chloride                         | 13      | mg/L  | 8.0  | 2.0  | 1  | 02/19/2022 07:09 | 02/19/2022 07:09 | J   |
| Nitrate (as N)                   | 0.36 I  | mg/L  | 0.80 | 0.20 | 1  | 02/19/2022 07:09 | 02/19/2022 07:09 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |         |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | 0.07    | mg/L  | 0.04 | 0.02 | 1  | 02/21/2022 13:06 | 02/21/2022 13:06 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | 479     | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

## Analytical Results

### Analysis Results Comments

#### 1,2-Dibromo-3-Chloropropane

See Case Narration

### Surrogates

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 107            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 108            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 103            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 105            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 101            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333003      **Date Collected:** 02/18/2022 08:38      **Matrix:** Water  
**Sample ID:** MWB13S      **Date Received:** 02/18/2022 11:40

| Parameter  | Results         | Units | PQL    | MDL     | DF | Prepared         | Analyzed         | Lab |
|--|-----------------|-------|--------|---------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                 |       |        |         |    |                  |                  |     |
| Arsenic  | 0.0080 U        | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/24/2022 12:20 | J   |
| Barium   | <b>0.0035 I</b> | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Beryllium  | 0.0020 U        | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Cadmium  | 0.00050 U       | mg/L  | 0.0020 | 0.00050 | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Chromium   | <b>0.11</b>     | mg/L  | 0.020  | 0.0050  | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Cobalt   | 0.0010 U        | mg/L  | 0.0040 | 0.0010  | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Copper   | 0.010 U         | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Iron   | <b>1600</b>     | ug/L  | 800    | 200     | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Lead   | <b>0.0033 I</b> | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Nickel   | 0.010 U         | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Silver   | 0.0080 U        | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Sodium   | <b>47</b>       | mg/L  | 3.2    | 0.80    | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Vanadium   | <b>0.044</b>    | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| Zinc   | 0.050 U         | mg/L  | 0.20   | 0.050   | 1  | 02/23/2022 03:21 | 02/23/2022 15:50 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                 |       |        |         |    |                  |                  |     |
| Antimony   | 1.0 U           | ug/L  | 4.0    | 1.0     | 1  | 02/22/2022 07:00 | 02/22/2022 17:17 | J   |
| Selenium   | <b>4.0 I</b>    | ug/L  | 5.0    | 1.2     | 1  | 02/22/2022 07:00 | 02/22/2022 17:17 | J   |
| Thallium   | 0.25 U          | ug/L  | 1.0    | 0.25    | 1  | 02/22/2022 07:00 | 02/22/2022 17:17 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                 |       |        |         |    |                  |                  |     |
| Mercury  | <b>0.014 I</b>  | ug/L  | 0.10   | 0.011   | 1  | 03/02/2022 12:22 | 03/02/2022 17:28 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                 |       |        |         |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U         | ug/L  | 0.20   | 0.050   | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U         | ug/L  | 0.10   | 0.019   | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                 |       |        |         |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U          | ug/L  | 1.0    | 0.25    | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U          | ug/L  | 2.0    | 0.50    | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U          | ug/L  | 1.0    | 0.20    | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333003      **Date Collected:** 02/18/2022 08:38      **Matrix:** Water  
**Sample ID:** MWB13S      **Date Received:** 02/18/2022 11:40

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333003      **Date Collected:** 02/18/2022 08:38      **Matrix:** Water  
**Sample ID:** MWB13S      **Date Received:** 02/18/2022 11:40

| Parameter                        | Results       | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Methylene Chloride               | 1.2 U         | ug/L  | 5.0  | 1.2  | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Styrene                          | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Toluene                          | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Trichloroethene                  | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Trichlorofluoromethane           | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Vinyl Acetate                    | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Vinyl Chloride                   | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| Xylene (Total)                   | 0.75 U        | ug/L  | 3.0  | 0.75 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| cis-1,3-Dichloropropene          | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 13:44 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |               |       |      |      |    |                  |                  |     |
| Chloride                         | <b>74</b>     | mg/L  | 16   | 4.0  | 2  | 02/19/2022 07:32 | 02/19/2022 07:32 | J   |
| Nitrate (as N)                   | <b>0.88 I</b> | mg/L  | 1.6  | 0.40 | 2  | 02/19/2022 07:32 | 02/19/2022 07:32 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |               |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | 0.02 U        | mg/L  | 0.04 | 0.02 | 1  | 02/21/2022 13:07 | 02/21/2022 13:07 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |               |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>313</b>    | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| <b>Surrogates</b>         |              |                      |                     |                       |                       |            |
|---------------------------|--------------|----------------------|---------------------|-----------------------|-----------------------|------------|
| <b>Parameter</b>          | <b>Units</b> | <b>Spiked Amount</b> | <b>Spike Result</b> | <b>Spike Recovery</b> | <b>Control Limits</b> | <b>Lab</b> |
| 1,2-Dichloroethane-d4 (S) | ug/L         | 50                   | 53                  | 105                   | 70 - 128              | J          |
| Toluene-d8 (S)            | ug/L         | 50                   | 51                  | 102                   | 77 - 119              | J          |
| Bromofluorobenzene (S)    | ug/L         | 50                   | 55                  | 109                   | 86 - 123              | J          |
| Toluene-d8 (S)            | ug/L         | 50                   | 53                  | 107                   | 80 - 121              | J          |
| 1,2-Dichloroethane-d4 (S) | ug/L         | 50                   | 51                  | 102                   | 77 - 125              | J          |
| Bromofluorobenzene (S)    | ug/L         | 50                   | 51                  | 103                   | 80 - 129              | J          |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333004      **Date Collected:** 02/18/2022 10:03      **Matrix:** Water  
**Sample ID:** MWB27S      **Date Received:** 02/18/2022 11:40

| Parameter  | Results   | Units | PQL    | MDL     | DF | Prepared         | Analyzed         | Lab |
|--|-----------|-------|--------|---------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |           |       |        |         |    |                  |                  |     |
| Arsenic  | 0.0080 U  | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/24/2022 12:33 | J   |
| Barium   | 0.0030 U  | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Beryllium  | 0.0020 U  | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Cadmium  | 0.00050 U | mg/L  | 0.0020 | 0.00050 | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Chromium   | 0.0050 U  | mg/L  | 0.020  | 0.0050  | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Cobalt   | 0.0010 U  | mg/L  | 0.0040 | 0.0010  | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Copper   | 0.010 U   | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Iron   | 200 U     | ug/L  | 800    | 200     | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Lead   | 0.0030 U  | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Nickel   | 0.010 U   | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Silver   | 0.0080 U  | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Sodium   | 26        | mg/L  | 3.2    | 0.80    | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Vanadium   | 0.012     | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| Zinc   | 0.050 U   | mg/L  | 0.20   | 0.050   | 1  | 02/23/2022 03:21 | 02/23/2022 15:54 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |           |       |        |         |    |                  |                  |     |
| Antimony   | 1.0 U     | ug/L  | 4.0    | 1.0     | 1  | 02/22/2022 07:00 | 02/22/2022 17:22 | J   |
| Selenium   | 1.2 U     | ug/L  | 5.0    | 1.2     | 1  | 02/22/2022 07:00 | 02/22/2022 17:22 | J   |
| Thallium   | 0.25 U    | ug/L  | 1.0    | 0.25    | 1  | 02/22/2022 07:00 | 02/22/2022 17:22 | J   |
| <b>METALS (SW-846 7470A)</b>                       |           |       |        |         |    |                  |                  |     |
| Mercury  | 0.013 I   | ug/L  | 0.10   | 0.011   | 1  | 03/02/2022 12:22 | 03/02/2022 17:32 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |           |       |        |         |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U   | ug/L  | 0.20   | 0.050   | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U   | ug/L  | 0.10   | 0.019   | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |           |       |        |         |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U    | ug/L  | 1.0    | 0.25    | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U    | ug/L  | 2.0    | 0.50    | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U    | ug/L  | 1.0    | 0.20    | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333004      **Date Collected:** 02/18/2022 10:03      **Matrix:** Water  
**Sample ID:** MWB27S      **Date Received:** 02/18/2022 11:40

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333004      **Date Collected:** 02/18/2022 10:03      **Matrix:** Water  
**Sample ID:** MWB27S      **Date Received:** 02/18/2022 11:40

| Parameter                        | Results       | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Methylene Chloride               | 1.2 U         | ug/L  | 5.0  | 1.2  | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Styrene                          | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Toluene                          | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Trichloroethene                  | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Trichlorofluoromethane           | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Vinyl Acetate                    | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Vinyl Chloride                   | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| Xylene (Total)                   | 0.75 U        | ug/L  | 3.0  | 0.75 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| cis-1,3-Dichloropropene          | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:08 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |               |       |      |      |    |                  |                  |     |
| Chloride                         | <b>53</b>     | mg/L  | 8.0  | 2.0  | 1  | 02/19/2022 07:55 | 02/19/2022 07:55 | J   |
| Nitrate (as N)                   | <b>0.25 I</b> | mg/L  | 0.80 | 0.20 | 1  | 02/19/2022 07:55 | 02/19/2022 07:55 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |               |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | <b>0.7</b>    | mg/L  | 0.04 | 0.02 | 1  | 02/21/2022 13:09 | 02/21/2022 13:09 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |               |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>731</b>    | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 102            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 109            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 55           | 109            | 70 - 128       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 105            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 107            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333005      **Date Collected:** 02/18/2022 10:59      **Matrix:** Water  
**Sample ID:** MWB29S      **Date Received:** 02/18/2022 11:40

| Parameter  | Results         | Units | PQL    | MDL     | DF | Prepared         | Analyzed         | Lab |
|--|-----------------|-------|--------|---------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                 |       |        |         |    |                  |                  |     |
| Arsenic  | 0.0080 U        | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/24/2022 12:37 | J   |
| Barium   | <b>0.011 I</b>  | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Beryllium  | 0.0020 U        | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Cadmium  | 0.00050 U       | mg/L  | 0.0020 | 0.00050 | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Chromium   | 0.0050 U        | mg/L  | 0.020  | 0.0050  | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Cobalt   | 0.0010 U        | mg/L  | 0.0040 | 0.0010  | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Copper   | 0.010 U         | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Iron   | <b>350 I</b>    | ug/L  | 800    | 200     | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Lead   | 0.0030 U        | mg/L  | 0.012  | 0.0030  | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Nickel   | 0.010 U         | mg/L  | 0.040  | 0.010   | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Silver   | 0.0080 U        | mg/L  | 0.032  | 0.0080  | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Sodium   | <b>9.0</b>      | mg/L  | 3.2    | 0.80    | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Vanadium   | <b>0.0052 I</b> | mg/L  | 0.0080 | 0.0020  | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| Zinc   | 0.050 U         | mg/L  | 0.20   | 0.050   | 1  | 02/23/2022 03:21 | 02/23/2022 15:58 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                 |       |        |         |    |                  |                  |     |
| Antimony   | 1.0 U           | ug/L  | 4.0    | 1.0     | 1  | 02/22/2022 07:00 | 02/22/2022 17:28 | J   |
| Selenium   | 1.2 U           | ug/L  | 5.0    | 1.2     | 1  | 02/22/2022 07:00 | 02/22/2022 17:28 | J   |
| Thallium   | 0.25 U          | ug/L  | 1.0    | 0.25    | 1  | 02/22/2022 07:00 | 02/22/2022 17:28 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                 |       |        |         |    |                  |                  |     |
| Mercury  | 0.011 U         | ug/L  | 0.10   | 0.011   | 1  | 03/02/2022 12:22 | 03/02/2022 17:36 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                 |       |        |         |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U         | ug/L  | 0.20   | 0.050   | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U         | ug/L  | 0.10   | 0.019   | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                 |       |        |         |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U          | ug/L  | 1.0    | 0.25    | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U          | ug/L  | 2.0    | 0.50    | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U          | ug/L  | 1.0    | 0.20    | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333005      **Date Collected:** 02/18/2022 10:59      **Matrix:** Water  
**Sample ID:** MWB29S      **Date Received:** 02/18/2022 11:40

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333005      **Date Collected:** 02/18/2022 10:59      **Matrix:** Water  
**Sample ID:** MWB29S      **Date Received:** 02/18/2022 11:40

| Parameter                        | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Methylene Chloride               | 1.2 U   | ug/L  | 5.0  | 1.2  | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Styrene                          | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Toluene                          | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Trichloroethene                  | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Trichlorofluoromethane           | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Vinyl Acetate                    | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Vinyl Chloride                   | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| Xylene (Total)                   | 0.75 U  | ug/L  | 3.0  | 0.75 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| cis-1,3-Dichloropropene          | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:32 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |         |       |      |      |    |                  |                  |     |
| Chloride                         | 15      | mg/L  | 8.0  | 2.0  | 1  | 02/19/2022 08:18 | 02/19/2022 08:18 | J   |
| Nitrate (as N)                   | 0.20 I  | mg/L  | 0.80 | 0.20 | 1  | 02/19/2022 08:18 | 02/19/2022 08:18 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |         |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | 0.2     | mg/L  | 0.04 | 0.02 | 1  | 02/21/2022 13:10 | 02/21/2022 13:10 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | 61      | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 102            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 110            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 54           | 107            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 103            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333006      **Date Collected:** 02/18/2022 00:00      **Matrix:** Water  
**Sample ID:** TRIP      **Date Received:** 02/18/2022 11:40

| Parameter  | Results | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|------|-------|----|------------------|------------------|-----|
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L  | 0.20 | 0.050 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L  | 0.10 | 0.019 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U  | ug/L  | 1.0  | 0.20  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,1,2-Trichloroethane                              | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,1-Dichloroethane                                 | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,1-Dichloroethylene                               | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,2,3-Trichloropropane                             | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,2-Dichlorobenzene                                | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,2-Dichloroethane                                 | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,2-Dichloropropane                                | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 1,4-Dichlorobenzene                                | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 2-Butanone (MEK)                                   | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 2-Hexanone   | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| 4-Methyl-2-pentanone (MIBK)                        | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Acetone  | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Acrylonitrile                                      | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Benzene  | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Bromochloromethane                                 | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Bromodichloromethane                               | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Bromoform  | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Bromomethane                                       | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Carbon Disulfide                                   | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Carbon Tetrachloride                               | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333006      **Date Collected:** 02/18/2022 00:00      **Matrix:** Water  
**Sample ID:** TRIP      **Date Received:** 02/18/2022 11:40

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/21/2022 08:35 | 02/21/2022 14:56 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 54           | 108            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 100            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 108            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 104            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 105            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 101            | 80 - 129       | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333007 <b>Date Collected:</b> 02/18/2022 09:07 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB13I <b>Date Received:</b> 02/18/2022 11:40                         |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 340 I   | ug/L  | 800  | 200  | 1  | 02/23/2022 03:21 | 02/23/2022 16:03 | J   |
| Sodium  | 3.2     | mg/L  | 3.2  | 0.80 | 1  | 02/23/2022 03:21 | 02/23/2022 16:03 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 5.5 I   | mg/L  | 8.0  | 2.0  | 1  | 02/19/2022 08:41 | 02/19/2022 08:41 | J   |
| Nitrate (as N)  | 0.20 U  | mg/L  | 0.80 | 0.20 | 1  | 02/19/2022 08:41 | 02/19/2022 08:41 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.06    | mg/L  | 0.04 | 0.02 | 1  | 02/21/2022 13:11 | 02/21/2022 13:11 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 38      | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333008 <b>Date Collected:</b> 02/18/2022 09:36 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB271 <b>Date Received:</b> 02/18/2022 11:40                         |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 500 I   | ug/L  | 800  | 200  | 1  | 02/23/2022 03:21 | 02/23/2022 16:07 | J   |
| Sodium  | 3.3     | mg/L  | 3.2  | 0.80 | 1  | 02/23/2022 03:21 | 02/23/2022 16:07 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 5.4 I   | mg/L  | 8.0  | 2.0  | 1  | 02/19/2022 09:27 | 02/19/2022 09:27 | J   |
| Nitrate (as N)  | 0.20 I  | mg/L  | 0.80 | 0.20 | 1  | 02/19/2022 09:27 | 02/19/2022 09:27 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.08    | mg/L  | 0.04 | 0.02 | 1  | 02/21/2022 13:21 | 02/21/2022 13:21 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 25      | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333009 <b>Date Collected:</b> 02/18/2022 10:31 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB29I <b>Date Received:</b> 02/18/2022 11:40                         |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 300 I   | ug/L  | 800  | 200  | 1  | 02/23/2022 03:21 | 02/23/2022 16:11 | J   |
| Sodium  | 3.6     | mg/L  | 3.2  | 0.80 | 1  | 02/23/2022 03:21 | 02/23/2022 16:11 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 6.1 I   | mg/L  | 8.0  | 2.0  | 1  | 02/19/2022 09:50 | 02/19/2022 09:50 | J   |
| Nitrate (as N)  | 0.79 I  | mg/L  | 0.80 | 0.20 | 1  | 02/19/2022 09:50 | 02/19/2022 09:50 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.06    | mg/L  | 0.04 | 0.02 | 1  | 02/21/2022 13:25 | 02/21/2022 13:25 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 31      | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333010 <b>Date Collected:</b> 02/18/2022 07:11 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB12I <b>Date Received:</b> 02/18/2022 11:40                         |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 200 U   | ug/L  | 800  | 200  | 1  | 02/23/2022 03:21 | 02/23/2022 16:16 | J   |
| Sodium  | 3.2 I   | mg/L  | 3.2  | 0.80 | 1  | 02/23/2022 03:21 | 02/23/2022 16:16 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 5.1 I   | mg/L  | 8.0  | 2.0  | 1  | 02/19/2022 10:13 | 02/19/2022 10:13 | J   |
| Nitrate (as N)  | 0.20 U  | mg/L  | 0.80 | 0.20 | 1  | 02/19/2022 10:13 | 02/19/2022 10:13 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.04 I  | mg/L  | 0.04 | 0.02 | 1  | 02/21/2022 13:26 | 02/21/2022 13:26 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 32      | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |
| Total Dissolved Solids  | 40      | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |

**Analysis Results Comments**

**Total Dissolved Solids**

Q|Missed Hold Time





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results       | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333011 <b>Date Collected:</b> 02/18/2022 11:05 <b>Matrix:</b> Water |               |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> EQUIPMENT BLANK <b>Date Received:</b> 02/18/2022 11:40                |               |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |               |       |      |      |    |                  |                  |     |
| Iron  | 200 U         | ug/L  | 800  | 200  | 1  | 02/23/2022 03:21 | 02/23/2022 16:20 | J   |
| Sodium  | 0.80 U        | mg/L  | 3.2  | 0.80 | 1  | 02/23/2022 03:21 | 02/23/2022 16:20 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |               |       |      |      |    |                  |                  |     |
| Chloride  | 2.0 U         | mg/L  | 8.0  | 2.0  | 1  | 02/19/2022 10:36 | 02/19/2022 10:36 | J   |
| Nitrate (as N)  | 0.20 U        | mg/L  | 0.80 | 0.20 | 1  | 02/19/2022 10:36 | 02/19/2022 10:36 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |               |       |      |      |    |                  |                  |     |
| Ammonia (N)   | <b>0.02 I</b> | mg/L  | 0.04 | 0.02 | 1  | 02/21/2022 13:27 | 02/21/2022 13:27 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |               |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 10 U          | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333012      **Date Collected:** 02/21/2022 09:27      **Matrix:** Water  
**Sample ID:** MWB-35S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:40 | J   |
| Barium   | 3.0 U          | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:39 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:40 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/25/2022 04:03 | 02/25/2022 16:39 | J   |
| Chromium   | 5.0 U          | ug/L  | 20   | 5.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:39 | J   |
| Cobalt   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:40 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:39 | J   |
| Iron   | 200 U          | ug/L  | 800  | 200   | 1  | 02/25/2022 04:03 | 02/28/2022 13:40 | J   |
| Lead   | 3.0 U          | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:39 | J   |
| Nickel   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:39 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:39 | J   |
| Sodium   | <b>2.0 I</b>   | mg/L  | 3.2  | 0.80  | 1  | 02/25/2022 04:03 | 02/25/2022 16:39 | J   |
| Vanadium   | <b>3.9 I</b>   | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:40 | J   |
| Zinc   | 50 U           | ug/L  | 200  | 50    | 1  | 02/25/2022 04:03 | 02/25/2022 16:39 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 20:57 | J   |
| Selenium   | 1.2 U          | ug/L  | 5.0  | 1.2   | 1  | 02/22/2022 07:00 | 02/22/2022 20:57 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 20:57 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.011 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/02/2022 17:40 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                        | Results       | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Methylene Chloride               | 1.2 U         | ug/L  | 5.0  | 1.2  | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Styrene                          | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Toluene                          | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Trichloroethene                  | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Trichlorofluoromethane           | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Vinyl Acetate                    | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Vinyl Chloride                   | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| Xylene (Total)                   | 0.75 U        | ug/L  | 3.0  | 0.75 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| cis-1,3-Dichloropropene          | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 21:42 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |               |       |      |      |    |                  |                  |     |
| Chloride                         | <b>4.0 I</b>  | mg/L  | 8.0  | 2.0  | 1  | 02/21/2022 18:21 | 02/21/2022 18:21 | J   |
| Nitrate (as N)                   | <b>0.20 I</b> | mg/L  | 0.80 | 0.20 | 1  | 02/21/2022 18:21 | 02/21/2022 18:21 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |               |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | <b>0.07</b>   | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 11:31 | 02/28/2022 11:31 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |               |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>16</b>     | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |

Lab ID: J2202333012  
 Sample ID: MWB-35S

Date Collected: 02/21/2022 09:27  
 Date Received: 02/21/2022 15:15

Matrix: Water





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Analysis Results Comments**

**1,2-Dibromo-3-Chloropropane**

See Case Narration

**Arsenic**

See Case Narration

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 54           | 107            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 110            | 86 - 123       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 105            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 103            | 80 - 129       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 103            | 77 - 125       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333013      **Date Collected:** 02/21/2022 08:11      **Matrix:** Water  
**Sample ID:** MWB-3S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results      | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|--------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |              |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U        | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 03/01/2022 12:40 | J   |
| Barium   | <b>15</b>    | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:44 | J   |
| Beryllium  | 2.0 U        | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:45 | J   |
| Cadmium  | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/25/2022 04:03 | 02/25/2022 16:44 | J   |
| Chromium   | 5.0 U        | ug/L  | 20   | 5.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:44 | J   |
| Cobalt   | 1.0 U        | ug/L  | 4.0  | 1.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:45 | J   |
| Copper   | 10 U         | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:44 | J   |
| Iron   | <b>750 I</b> | ug/L  | 800  | 200   | 1  | 02/25/2022 04:03 | 02/28/2022 13:45 | J   |
| Lead   | 3.0 U        | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:44 | J   |
| Nickel   | 10 U         | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:44 | J   |
| Silver   | 8.0 U        | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:44 | J   |
| Sodium   | <b>5.1</b>   | mg/L  | 3.2  | 0.80  | 1  | 02/25/2022 04:03 | 02/25/2022 16:44 | J   |
| Vanadium   | <b>2.7 I</b> | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:45 | J   |
| Zinc   | 50 U         | ug/L  | 200  | 50    | 1  | 02/25/2022 04:03 | 02/25/2022 16:44 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |              |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U        | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 21:14 | J   |
| Selenium   | 1.2 U        | ug/L  | 5.0  | 1.2   | 1  | 02/22/2022 07:00 | 02/22/2022 21:14 | J   |
| Thallium   | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 21:14 | J   |
| <b>METALS (SW-846 7470A)</b>                       |              |       |      |       |    |                  |                  |     |
| Mercury  | 0.011 U      | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 14:42 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |              |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U      | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U      | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |              |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U       | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333013      **Date Collected:** 02/21/2022 08:11      **Matrix:** Water  
**Sample ID:** MWB-3S      **Date Received:** 02/21/2022 15:15

| Parameter                        | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Methylene Chloride               | 1.2 U   | ug/L  | 5.0  | 1.2  | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Styrene                          | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Toluene                          | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Trichloroethene                  | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Trichlorofluoromethane           | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Vinyl Acetate                    | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Vinyl Chloride                   | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| Xylene (Total)                   | 0.75 U  | ug/L  | 3.0  | 0.75 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| cis-1,3-Dichloropropene          | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:06 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |         |       |      |      |    |                  |                  |     |
| Chloride                         | 8.6     | mg/L  | 8.0  | 2.0  | 1  | 02/21/2022 18:44 | 02/21/2022 18:44 | J   |
| Nitrate (as N)                   | 0.20 U  | mg/L  | 0.80 | 0.20 | 1  | 02/21/2022 18:44 | 02/21/2022 18:44 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |         |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | 0.04 I  | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 11:33 | 02/28/2022 11:33 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | 34      | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Analysis Results Comments**

**Vinyl Chloride**

J4|Estimated Result

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 100            | 77 - 119       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 107            | 70 - 128       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 108            | 86 - 123       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 104            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 101            | 80 - 129       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 103            | 77 - 125       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333014      **Date Collected:** 02/21/2022 07:39      **Matrix:** Water  
**Sample ID:** MWB-2S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:49 | J   |
| Barium   | <b>6.3 I</b>   | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:48 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:49 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/25/2022 04:03 | 02/25/2022 16:48 | J   |
| Chromium   | 5.0 U          | ug/L  | 20   | 5.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:48 | J   |
| Cobalt   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:49 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:48 | J   |
| Iron   | <b>330 I</b>   | ug/L  | 800  | 200   | 1  | 02/25/2022 04:03 | 02/28/2022 13:49 | J   |
| Lead   | <b>4.1 I</b>   | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:48 | J   |
| Nickel   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:48 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:48 | J   |
| Sodium   | <b>3.4</b>     | mg/L  | 3.2  | 0.80  | 1  | 02/25/2022 04:03 | 02/25/2022 16:48 | J   |
| Vanadium   | <b>5.0 I</b>   | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:49 | J   |
| Zinc   | 50 U           | ug/L  | 200  | 50    | 1  | 02/25/2022 04:03 | 02/25/2022 16:48 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 21:19 | J   |
| Selenium   | 1.2 U          | ug/L  | 5.0  | 1.2   | 1  | 02/22/2022 07:00 | 02/22/2022 21:19 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 21:19 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.050 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 14:54 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                        | Results       | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Methylene Chloride               | 1.2 U         | ug/L  | 5.0  | 1.2  | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Styrene                          | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Toluene                          | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Trichloroethene                  | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Trichlorofluoromethane           | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Vinyl Acetate                    | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Vinyl Chloride                   | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| Xylene (Total)                   | 0.75 U        | ug/L  | 3.0  | 0.75 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| cis-1,3-Dichloropropene          | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:31 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |               |       |      |      |    |                  |                  |     |
| Chloride                         | <b>4.4 I</b>  | mg/L  | 8.0  | 2.0  | 1  | 02/21/2022 19:07 | 02/21/2022 19:07 | J   |
| Nitrate (as N)                   | <b>0.25 I</b> | mg/L  | 0.80 | 0.20 | 1  | 02/21/2022 19:07 | 02/21/2022 19:07 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |               |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | <b>0.05</b>   | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 11:34 | 02/28/2022 11:34 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |               |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>71</b>     | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| <b>Surrogates</b>         |              |                      |                     |                       |                       |            |
|---------------------------|--------------|----------------------|---------------------|-----------------------|-----------------------|------------|
| <b>Parameter</b>          | <b>Units</b> | <b>Spiked Amount</b> | <b>Spike Result</b> | <b>Spike Recovery</b> | <b>Control Limits</b> | <b>Lab</b> |
| Toluene-d8 (S)            | ug/L         | 50                   | 50                  | 100                   | 77 - 119              | J          |
| Bromofluorobenzene (S)    | ug/L         | 50                   | 55                  | 110                   | 86 - 123              | J          |
| 1,2-Dichloroethane-d4 (S) | ug/L         | 50                   | 52                  | 105                   | 70 - 128              | J          |
| 1,2-Dichloroethane-d4 (S) | ug/L         | 50                   | 51                  | 101                   | 77 - 125              | J          |
| Toluene-d8 (S)            | ug/L         | 50                   | 52                  | 104                   | 80 - 121              | J          |
| Bromofluorobenzene (S)    | ug/L         | 50                   | 52                  | 104                   | 80 - 129              | J          |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333015      **Date Collected:** 02/21/2022 10:59      **Matrix:** Water  
**Sample ID:** MWB-32S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:53 | J   |
| Barium   | <b>12 I</b>    | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:52 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:53 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/25/2022 04:03 | 02/25/2022 16:52 | J   |
| Chromium   | 5.0 U          | ug/L  | 20   | 5.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:52 | J   |
| Cobalt   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:53 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:52 | J   |
| Iron   | <b>950</b>     | ug/L  | 800  | 200   | 1  | 02/25/2022 04:03 | 02/28/2022 13:53 | J   |
| Lead   | <b>4.4 I</b>   | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:52 | J   |
| Nickel   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:52 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:52 | J   |
| Sodium   | <b>9.8</b>     | mg/L  | 3.2  | 0.80  | 1  | 02/25/2022 04:03 | 02/25/2022 16:52 | J   |
| Vanadium   | <b>31</b>      | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:53 | J   |
| Zinc   | 50 U           | ug/L  | 200  | 50    | 1  | 02/25/2022 04:03 | 02/25/2022 16:52 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 21:24 | J   |
| Selenium   | <b>3.5 I</b>   | ug/L  | 5.0  | 1.2   | 1  | 02/22/2022 07:00 | 02/22/2022 21:24 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 21:24 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.036 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 14:58 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333015      **Date Collected:** 02/21/2022 10:59      **Matrix:** Water  
**Sample ID:** MWB-32S      **Date Received:** 02/21/2022 15:15

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333015      **Date Collected:** 02/21/2022 10:59      **Matrix:** Water  
**Sample ID:** MWB-32S      **Date Received:** 02/21/2022 15:15

| Parameter                        | Results       | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Methylene Chloride               | 1.2 U         | ug/L  | 5.0  | 1.2  | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Styrene                          | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Toluene                          | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Trichloroethene                  | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Trichlorofluoromethane           | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Vinyl Acetate                    | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Vinyl Chloride                   | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| Xylene (Total)                   | 0.75 U        | ug/L  | 3.0  | 0.75 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| cis-1,3-Dichloropropene          | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 22:54 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |               |       |      |      |    |                  |                  |     |
| Chloride                         | <b>21</b>     | mg/L  | 8.0  | 2.0  | 1  | 02/22/2022 10:32 | 02/22/2022 10:32 | J   |
| Nitrate (as N)                   | <b>0.63 I</b> | mg/L  | 0.80 | 0.20 | 1  | 02/22/2022 10:32 | 02/22/2022 10:32 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |               |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | <b>0.6</b>    | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 11:35 | 02/28/2022 11:35 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |               |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>194</b>    | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 108            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 103            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 106            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333016      **Date Collected:** 02/21/2022 11:28      **Matrix:** Water  
**Sample ID:** MWB-33S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 03/01/2022 12:44 | J   |
| Barium   | <b>9.7 I</b>   | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:57 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:57 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/25/2022 04:03 | 02/25/2022 16:57 | J   |
| Chromium   | 5.0 U          | ug/L  | 20   | 5.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:57 | J   |
| Cobalt   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:57 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:57 | J   |
| Iron   | <b>440 I</b>   | ug/L  | 800  | 200   | 1  | 02/25/2022 04:03 | 02/28/2022 13:57 | J   |
| Lead   | <b>3.1 I</b>   | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:57 | J   |
| Nickel   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 16:57 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/25/2022 16:57 | J   |
| Sodium   | <b>6.1</b>     | mg/L  | 3.2  | 0.80  | 1  | 02/25/2022 04:03 | 02/25/2022 16:57 | J   |
| Vanadium   | <b>7.5 I</b>   | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 13:57 | J   |
| Zinc   | 50 U           | ug/L  | 200  | 50    | 1  | 02/25/2022 04:03 | 02/25/2022 16:57 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 21:29 | J   |
| Selenium   | 1.2 U          | ug/L  | 5.0  | 1.2   | 1  | 02/22/2022 07:00 | 02/22/2022 21:29 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 21:29 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.013 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:02 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333016      **Date Collected:** 02/21/2022 11:28      **Matrix:** Water  
**Sample ID:** MWB-33S      **Date Received:** 02/21/2022 15:15

| Parameter                   | Results       | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 1,1-Dichloroethane          | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 1,1-Dichloroethylene        | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 1,2,3-Trichloropropane      | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 1,2-Dichlorobenzene         | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 1,2-Dichloroethane          | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 1,2-Dichloropropane         | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 1,4-Dichlorobenzene         | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 2-Butanone (MEK)            | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 2-Hexanone                  | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Acetone                     | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Acrylonitrile               | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Benzene                     | <b>0.28 I</b> | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Bromochloromethane          | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Bromodichloromethane        | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Bromoform                   | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Bromomethane                | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Carbon Disulfide            | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Carbon Tetrachloride        | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Chlorobenzene               | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Chloroethane                | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Chloroform                  | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Chloromethane               | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Dibromochloromethane        | 0.20 U        | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Dibromomethane              | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Ethylbenzene                | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333016      **Date Collected:** 02/21/2022 11:28      **Matrix:** Water  
**Sample ID:** MWB-33S      **Date Received:** 02/21/2022 15:15

| Parameter                        | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Methylene Chloride               | 1.2 U   | ug/L  | 5.0  | 1.2  | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Styrene                          | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Toluene                          | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Trichloroethene                  | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Trichlorofluoromethane           | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Vinyl Acetate                    | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Vinyl Chloride                   | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| Xylene (Total)                   | 0.75 U  | ug/L  | 3.0  | 0.75 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| cis-1,3-Dichloropropene          | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:18 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |         |       |      |      |    |                  |                  |     |
| Chloride                         | 15      | mg/L  | 8.0  | 2.0  | 1  | 02/22/2022 10:56 | 02/22/2022 10:56 | J   |
| Nitrate (as N)                   | 0.22 I  | mg/L  | 0.80 | 0.20 | 1  | 02/22/2022 10:56 | 02/22/2022 10:56 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |         |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | 1       | mg/L  | 0.2  | 0.09 | 5  | 02/28/2022 14:18 | 02/28/2022 14:18 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | 100     | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 102            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 110            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 107            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 104            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333017      **Date Collected:** 02/21/2022 11:59      **Matrix:** Water  
**Sample ID:** MWB-34S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:02 | J   |
| Barium   | <b>7.9 I</b>   | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:01 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:02 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/25/2022 04:03 | 02/25/2022 17:01 | J   |
| Chromium   | 5.0 U          | ug/L  | 20   | 5.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:01 | J   |
| Cobalt   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:02 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 17:01 | J   |
| Iron   | <b>720 I</b>   | ug/L  | 800  | 200   | 1  | 02/25/2022 04:03 | 02/28/2022 14:02 | J   |
| Lead   | 3.0 U          | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:01 | J   |
| Nickel   | <b>12 I</b>    | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 17:01 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:01 | J   |
| Sodium   | <b>140</b>     | mg/L  | 3.2  | 0.80  | 1  | 02/25/2022 04:03 | 02/25/2022 17:01 | J   |
| Vanadium   | <b>67</b>      | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:02 | J   |
| Zinc   | 50 U           | ug/L  | 200  | 50    | 1  | 02/25/2022 04:03 | 02/25/2022 17:01 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 21:34 | J   |
| Selenium   | <b>2.8 I</b>   | ug/L  | 5.0  | 1.2   | 1  | 02/22/2022 07:00 | 02/22/2022 21:34 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 21:34 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.025 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:06 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333017      **Date Collected:** 02/21/2022 11:59      **Matrix:** Water  
**Sample ID:** MWB-34S      **Date Received:** 02/21/2022 15:15

| Parameter                        | Results      | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|--------------|-------|-----|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U       | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Methylene Chloride               | 1.2 U        | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Styrene                          | 0.50 U       | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U       | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Toluene                          | 0.25 U       | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Trichloroethene                  | 0.25 U       | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Trichlorofluoromethane           | 0.50 U       | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Vinyl Acetate                    | 0.50 U       | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Vinyl Chloride                   | 0.25 U       | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| Xylene (Total)                   | 0.75 U       | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U       | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| cis-1,3-Dichloropropene          | 0.20 U       | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U       | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U       | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U       | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/23/2022 23:42 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |              |       |     |      |    |                  |                  |     |
| Chloride                         | <b>220</b>   | mg/L  | 40  | 10   | 5  | 02/22/2022 11:42 | 02/22/2022 11:42 | J   |
| Nitrate (as N)                   | <b>1.1 I</b> | mg/L  | 4.0 | 1.0  | 5  | 02/22/2022 11:42 | 02/22/2022 11:42 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |              |       |     |      |    |                  |                  |     |
| Ammonia (N)                      | <b>3</b>     | mg/L  | 0.4 | 0.2  | 10 | 02/28/2022 14:19 | 02/28/2022 14:19 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |              |       |     |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>819</b>   | mg/L  | 10  | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 54           | 107            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 99             | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 109            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 103            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 104            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333018      **Date Collected:** 02/21/2022 12:58      **Matrix:** Water  
**Sample ID:** MWB-39S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:06 | J   |
| Barium   | <b>13</b>      | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:05 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:06 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/25/2022 04:03 | 02/25/2022 17:05 | J   |
| Chromium   | 5.0 U          | ug/L  | 20   | 5.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:05 | J   |
| Cobalt   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:06 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 17:05 | J   |
| Iron   | <b>290 I</b>   | ug/L  | 800  | 200   | 1  | 02/25/2022 04:03 | 02/28/2022 14:06 | J   |
| Lead   | <b>5.2 I</b>   | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:05 | J   |
| Nickel   | <b>11 I</b>    | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 17:05 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:05 | J   |
| Sodium   | <b>140</b>     | mg/L  | 3.2  | 0.80  | 1  | 02/25/2022 04:03 | 02/25/2022 17:05 | J   |
| Vanadium   | <b>11</b>      | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:06 | J   |
| Zinc   | 50 U           | ug/L  | 200  | 50    | 1  | 02/25/2022 04:03 | 02/25/2022 17:05 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 21:51 | J   |
| Selenium   | 1.2 U          | ug/L  | 5.0  | 1.2   | 1  | 02/22/2022 07:00 | 02/22/2022 21:51 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 21:51 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.014 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:10 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results       | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 1,1-Dichloroethane          | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 1,1-Dichloroethylene        | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 1,2,3-Trichloropropane      | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 1,2-Dichlorobenzene         | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 1,2-Dichloroethane          | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 1,2-Dichloropropane         | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 1,4-Dichlorobenzene         | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 2-Butanone (MEK)            | <b>0.76 I</b> | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 2-Hexanone                  | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Acetone                     | <b>3.2</b>    | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Acrylonitrile               | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Benzene                     | <b>3.7</b>    | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Bromochloromethane          | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Bromodichloromethane        | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Bromoform                   | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Bromomethane                | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Carbon Disulfide            | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Carbon Tetrachloride        | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Chlorobenzene               | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Chloroethane                | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Chloroform                  | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Chloromethane               | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Dibromochloromethane        | 0.20 U        | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Dibromomethane              | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Ethylbenzene                | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333018      **Date Collected:** 02/21/2022 12:58      **Matrix:** Water  
**Sample ID:** MWB-39S      **Date Received:** 02/21/2022 15:15

| Parameter                        | Results       | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------------|-------|-----|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Methylene Chloride               | 1.2 U         | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Styrene                          | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Toluene                          | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Trichloroethene                  | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Trichlorofluoromethane           | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Vinyl Acetate                    | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Vinyl Chloride                   | <b>0.75 I</b> | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| Xylene (Total)                   | 0.75 U        | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| cis-1,3-Dichloropropene          | 0.20 U        | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U        | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:06 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |               |       |     |      |    |                  |                  |     |
| Chloride                         | <b>370</b>    | mg/L  | 40  | 10   | 5  | 02/22/2022 12:05 | 02/22/2022 12:05 | J   |
| Nitrate (as N)                   | <b>1.0 I</b>  | mg/L  | 4.0 | 1.0  | 5  | 02/22/2022 12:05 | 02/22/2022 12:05 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |               |       |     |      |    |                  |                  |     |
| Ammonia (N)                      | <b>10</b>     | mg/L  | 1   | 0.4  | 25 | 02/28/2022 14:21 | 02/28/2022 14:21 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |               |       |     |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>748</b>    | mg/L  | 10  | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 104            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 102            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 110            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 50           | 100            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 54           | 107            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 104            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333019      **Date Collected:** 02/21/2022 13:28      **Matrix:** Water  
**Sample ID:** MWB-40S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:19 | J   |
| Barium   | <b>79</b>      | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:09 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:19 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/25/2022 04:03 | 02/25/2022 17:09 | J   |
| Chromium   | 5.0 U          | ug/L  | 20   | 5.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:09 | J   |
| Cobalt   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:19 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 17:09 | J   |
| Iron   | <b>1200</b>    | ug/L  | 800  | 200   | 1  | 02/25/2022 04:03 | 02/28/2022 14:19 | J   |
| Lead   | <b>4.5 I</b>   | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:09 | J   |
| Nickel   | <b>11 I</b>    | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 17:09 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:09 | J   |
| Sodium   | <b>81</b>      | mg/L  | 3.2  | 0.80  | 1  | 02/25/2022 04:03 | 02/25/2022 17:09 | J   |
| Vanadium   | <b>12</b>      | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:19 | J   |
| Zinc   | 50 U           | ug/L  | 200  | 50    | 1  | 02/25/2022 04:03 | 02/25/2022 17:09 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 21:55 | J   |
| Selenium   | 12 U           | ug/L  | 50   | 12    | 10 | 02/22/2022 07:00 | 02/25/2022 15:54 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 21:55 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.012 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:21 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results    | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|------------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 1,1-Dichloroethane          | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 1,1-Dichloroethylene        | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 1,2,3-Trichloropropane      | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 1,2-Dichlorobenzene         | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 1,2-Dichloroethane          | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 1,2-Dichloropropane         | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 1,4-Dichlorobenzene         | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 2-Butanone (MEK)            | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 2-Hexanone                  | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Acetone                     | <b>3.6</b> | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Acrylonitrile               | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Benzene                     | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Bromochloromethane          | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Bromodichloromethane        | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Bromoform                   | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Bromomethane                | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Carbon Disulfide            | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Carbon Tetrachloride        | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Chlorobenzene               | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Chloroethane                | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Chloroform                  | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Chloromethane               | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Dibromochloromethane        | 0.20 U     | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Dibromomethane              | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Ethylbenzene                | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                        | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Methylene Chloride               | 1.2 U   | ug/L  | 5.0  | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Styrene                          | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Toluene                          | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Trichloroethene                  | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Trichlorofluoromethane           | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Vinyl Acetate                    | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Vinyl Chloride                   | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| Xylene (Total)                   | 0.75 U  | ug/L  | 3.0  | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| cis-1,3-Dichloropropene          | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:30 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |         |       |      |      |    |                  |                  |     |
| Chloride                         | 140     | mg/L  | 8.0  | 2.0  | 1  | 02/22/2022 12:28 | 02/22/2022 12:28 | J   |
| Nitrate (as N)                   | 0.22 I  | mg/L  | 0.80 | 0.20 | 1  | 02/22/2022 12:28 | 02/22/2022 12:28 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |         |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | 4       | mg/L  | 0.8  | 0.3  | 20 | 02/28/2022 14:33 | 02/28/2022 14:33 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | 350     | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |

Lab ID: J2202333019  
 Sample ID: MWB-40S

Date Collected: 02/21/2022 13:28  
 Date Received: 02/21/2022 15:15

Matrix: Water





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 102            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 110            | 86 - 123       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 54           | 107            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 103            | 80 - 129       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 49           | 99             | 77 - 125       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333020      **Date Collected:** 02/21/2022 14:29      **Matrix:** Water  
**Sample ID:** MWB-21S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:23 | J   |
| Barium   | <b>20</b>      | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:22 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:23 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/25/2022 04:03 | 02/25/2022 17:22 | J   |
| Chromium   | 5.0 U          | ug/L  | 20   | 5.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:22 | J   |
| Cobalt   | <b>1.6 I</b>   | ug/L  | 4.0  | 1.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:23 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 17:22 | J   |
| Iron   | <b>350 I</b>   | ug/L  | 800  | 200   | 1  | 02/25/2022 04:03 | 02/28/2022 14:23 | J   |
| Lead   | 3.0 U          | ug/L  | 12   | 3.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:22 | J   |
| Nickel   | <b>14 I</b>    | ug/L  | 40   | 10    | 1  | 02/25/2022 04:03 | 02/25/2022 17:22 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 02/25/2022 04:03 | 02/25/2022 17:22 | J   |
| Sodium   | <b>110</b>     | mg/L  | 3.2  | 0.80  | 1  | 02/25/2022 04:03 | 02/25/2022 17:22 | J   |
| Vanadium   | <b>10</b>      | ug/L  | 8.0  | 2.0   | 1  | 02/25/2022 04:03 | 02/28/2022 14:23 | J   |
| Zinc   | <b>96 I</b>    | ug/L  | 200  | 50    | 1  | 02/25/2022 04:03 | 02/25/2022 17:22 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 22:00 | J   |
| Selenium   | 1.2 U          | ug/L  | 5.0  | 1.2   | 1  | 02/22/2022 07:00 | 02/22/2022 22:00 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 22:00 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.021 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:25 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333020      **Date Collected:** 02/21/2022 14:29      **Matrix:** Water  
**Sample ID:** MWB-21S      **Date Received:** 02/21/2022 15:15

| Parameter                   | Results    | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|------------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 1,1-Dichloroethane          | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 1,1-Dichloroethylene        | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 1,2,3-Trichloropropane      | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 1,2-Dichlorobenzene         | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 1,2-Dichloroethane          | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 1,2-Dichloropropane         | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 1,4-Dichlorobenzene         | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 2-Butanone (MEK)            | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 2-Hexanone                  | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Acetone                     | <b>2.5</b> | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Acrylonitrile               | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Benzene                     | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Bromochloromethane          | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Bromodichloromethane        | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Bromoform                   | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Bromomethane                | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Carbon Disulfide            | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Carbon Tetrachloride        | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Chlorobenzene               | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Chloroethane                | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Chloroform                  | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Chloromethane               | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Dibromochloromethane        | 0.20 U     | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Dibromomethane              | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Ethylbenzene                | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                        | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Methylene Chloride               | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Styrene                          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Toluene                          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Trichloroethene                  | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Trichlorofluoromethane           | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Vinyl Acetate                    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Vinyl Chloride                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| Xylene (Total)                   | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| cis-1,3-Dichloropropene          | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 00:54 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |         |       |     |      |    |                  |                  |     |
| Chloride                         | 170     | mg/L  | 40  | 10   | 5  | 02/22/2022 12:51 | 02/22/2022 12:51 | J   |
| Nitrate (as N)                   | 1.01    | mg/L  | 4.0 | 1.0  | 5  | 02/22/2022 12:51 | 02/22/2022 12:51 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |         |       |     |      |    |                  |                  |     |
| Ammonia (N)                      | 4       | mg/L  | 0.8 | 0.3  | 20 | 02/28/2022 14:35 | 02/28/2022 14:35 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |         |       |     |      |    |                  |                  |     |
| Total Dissolved Solids           | 576     | mg/L  | 10  | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 99             | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 108            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 105            | 70 - 128       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 104            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 101            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333021      **Date Collected:** 02/21/2022 13:59      **Matrix:** Water  
**Sample ID:** MWB-20S      **Date Received:** 02/21/2022 15:15

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Barium   | 3.0 U          | ug/L  | 12   | 3.0   | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Chromium   | 5.0 U          | ug/L  | 20   | 5.0   | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Cobalt   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Iron   | 200 U          | ug/L  | 800  | 200   | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Lead   | 3.0 U          | ug/L  | 12   | 3.0   | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Nickel   | 10 U           | ug/L  | 40   | 10    | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Sodium   | <b>48</b>      | mg/L  | 3.2  | 0.80  | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| Vanadium   | <b>10</b>      | ug/L  | 8.0  | 2.0   | 1  | 03/02/2022 09:33 | 03/04/2022 14:04 | J   |
| Zinc   | 50 U           | ug/L  | 200  | 50    | 1  | 03/02/2022 09:33 | 03/03/2022 18:29 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/22/2022 07:00 | 02/22/2022 22:06 | J   |
| Selenium   | <b>1.3 I</b>   | ug/L  | 5.0  | 1.2   | 1  | 02/22/2022 07:00 | 02/22/2022 22:06 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/22/2022 07:00 | 02/22/2022 22:06 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.023 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:29 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333021      **Date Collected:** 02/21/2022 13:59      **Matrix:** Water  
**Sample ID:** MWB-20S      **Date Received:** 02/21/2022 15:15

| Parameter                        | Results       | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Methylene Chloride               | 1.2 U         | ug/L  | 5.0  | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Styrene                          | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Toluene                          | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Trichloroethene                  | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Trichlorofluoromethane           | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Vinyl Acetate                    | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Vinyl Chloride                   | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| Xylene (Total)                   | 0.75 U        | ug/L  | 3.0  | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| cis-1,3-Dichloropropene          | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:18 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |               |       |      |      |    |                  |                  |     |
| Chloride                         | <b>64</b>     | mg/L  | 8.0  | 2.0  | 1  | 02/22/2022 13:14 | 02/22/2022 13:14 | J   |
| Nitrate (as N)                   | <b>0.31 I</b> | mg/L  | 0.80 | 0.20 | 1  | 02/22/2022 13:14 | 02/22/2022 13:14 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |               |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | <b>3</b>      | mg/L  | 0.4  | 0.2  | 10 | 02/28/2022 14:36 | 02/28/2022 14:36 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |               |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>200</b>    | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 105            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 99             | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 107            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 104            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 50           | 101            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333022      **Date Collected:** 02/21/2022 00:00      **Matrix:** Water  
**Sample ID:** TRIP BLANK 2      **Date Received:** 02/21/2022 15:15

| Parameter  | Results | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|------|-------|----|------------------|------------------|-----|
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U  | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,1,2-Trichloroethane                              | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,1-Dichloroethane                                 | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,1-Dichloroethylene                               | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,2,3-Trichloropropane                             | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,2-Dichlorobenzene                                | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,2-Dichloroethane                                 | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,2-Dichloropropane                                | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 1,4-Dichlorobenzene                                | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 2-Butanone (MEK)                                   | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 2-Hexanone   | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| 4-Methyl-2-pentanone (MIBK)                        | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Acetone  | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Acrylonitrile                                      | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Benzene  | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Bromochloromethane                                 | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Bromodichloromethane                               | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Bromoform  | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Bromomethane                                       | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Carbon Disulfide                                   | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Carbon Tetrachloride                               | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 01:42 | J   |

**Lab ID:** J2202333022  
**Sample ID:** TRIP BLANK 2

**Date Collected:** 02/21/2022 00:00  
**Date Received:** 02/21/2022 15:15

**Matrix:** Water

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FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 54           | 107            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 109            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 104            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 106            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333023 <b>Date Collected:</b> 02/21/2022 07:11 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB-2I <b>Date Received:</b> 02/21/2022 15:15                         |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 370 I   | ug/L  | 800  | 200  | 1  | 03/02/2022 09:33 | 03/03/2022 18:34 | J   |
| Sodium  | 5.0     | mg/L  | 3.2  | 0.80 | 1  | 03/02/2022 09:33 | 03/03/2022 18:34 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 7.8 I   | mg/L  | 8.0  | 2.0  | 1  | 02/22/2022 13:37 | 02/22/2022 13:37 | J   |
| Nitrate (as N)  | 0.21 I  | mg/L  | 0.80 | 0.20 | 1  | 02/22/2022 13:37 | 02/22/2022 13:37 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.02 U  | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 14:37 | 02/28/2022 14:37 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 36      | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333024 <b>Date Collected:</b> 02/21/2022 08:41 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB-3I <b>Date Received:</b> 02/21/2022 15:15                         |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 770 I   | ug/L  | 800  | 200  | 1  | 03/02/2022 09:33 | 03/03/2022 18:46 | J   |
| Sodium  | 3.5     | mg/L  | 3.2  | 0.80 | 1  | 03/02/2022 09:33 | 03/03/2022 18:46 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 6.9 I   | mg/L  | 8.0  | 2.0  | 1  | 02/22/2022 14:00 | 02/22/2022 14:00 | J   |
| Nitrate (as N)  | 0.22 I  | mg/L  | 0.80 | 0.20 | 1  | 02/22/2022 14:00 | 02/22/2022 14:00 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.02 U  | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 11:56 | 02/28/2022 11:56 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 25      | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333025 <b>Date Collected:</b> 02/21/2022 09:55 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB-35I <b>Date Received:</b> 02/21/2022 15:15                        |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 200 U   | ug/L  | 800  | 200  | 1  | 03/02/2022 09:33 | 03/03/2022 18:51 | J   |
| Sodium  | 3.0 I   | mg/L  | 3.2  | 0.80 | 1  | 03/02/2022 09:33 | 03/03/2022 18:51 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 2.8 I   | mg/L  | 8.0  | 2.0  | 1  | 02/22/2022 14:23 | 02/22/2022 14:23 | J   |
| Nitrate (as N)  | 0.21 I  | mg/L  | 0.80 | 0.20 | 1  | 02/22/2022 14:23 | 02/22/2022 14:23 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.02 U  | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 11:57 | 02/28/2022 11:57 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 34      | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333026 <b>Date Collected:</b> 02/21/2022 10:24 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB-32I <b>Date Received:</b> 02/21/2022 15:15                        |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 270 I   | ug/L  | 800  | 200  | 1  | 03/02/2022 09:33 | 03/03/2022 18:55 | J   |
| Sodium  | 3.1 I   | mg/L  | 3.2  | 0.80 | 1  | 03/02/2022 09:33 | 03/03/2022 18:55 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 5.2 I   | mg/L  | 8.0  | 2.0  | 1  | 02/23/2022 09:47 | 02/23/2022 09:47 | J   |
| Nitrate (as N)  | 0.20 U  | mg/L  | 0.80 | 0.20 | 1  | 02/23/2022 09:47 | 02/23/2022 09:47 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.02 U  | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 11:58 | 02/28/2022 11:58 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 30      | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333027 <b>Date Collected:</b> 02/21/2022 12:28 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB-34I <b>Date Received:</b> 02/21/2022 15:15                        |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 260 I   | ug/L  | 800  | 200  | 1  | 03/02/2022 09:33 | 03/03/2022 18:59 | J   |
| Sodium  | 3.3     | mg/L  | 3.2  | 0.80 | 1  | 03/02/2022 09:33 | 03/03/2022 18:59 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 5.7 I   | mg/L  | 8.0  | 2.0  | 1  | 02/23/2022 10:33 | 02/23/2022 10:33 | J   |
| Nitrate (as N)  | 0.24 I  | mg/L  | 0.80 | 0.20 | 1  | 02/23/2022 10:33 | 02/23/2022 10:33 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.05    | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 11:59 | 02/28/2022 11:59 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 52      | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333028      **Date Collected:** 02/22/2022 07:05      **Matrix:** Water  
**Sample ID:** SW-5      **Date Received:** 02/22/2022 10:10

| Parameter   | Results    | Units | PQL     | MDL      | DF | Prepared         | Analyzed         | Lab |
|---|------------|-------|---------|----------|----|------------------|------------------|-----|
| <b>FIELD PARAMETERS (Field Measurements)</b>        |            |       |         |          |    |                  |                  |     |
| Temperature   | 17.2       | °C    |         |          | 1  | 03/07/2022 09:28 | 03/07/2022 09:28 | J   |
| pH  | 7.54       | SU    |         |          | 1  | 03/07/2022 09:28 | 03/07/2022 09:28 | J   |
| <b>METALS (EPA 245.1)</b>                           |            |       |         |          |    |                  |                  |     |
| Mercury   | 0.000035 I | mg/L  | 0.00010 | 0.000011 | 1  | 02/28/2022 09:40 | 02/28/2022 13:41 | J   |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>            |            |       |         |          |    |                  |                  |     |
| Arsenic   | 12 I       | ug/L  | 32      | 8.0      | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Barium  | 32         | ug/L  | 12      | 3.0      | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Beryllium   | 2.0 U      | ug/L  | 8.0     | 2.0      | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Cadmium   | 0.50 U     | ug/L  | 2.0     | 0.50     | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Calcium   | 34         | mg/L  | 0.80    | 0.20     | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Chromium  | 5.0 U      | ug/L  | 20      | 5.0      | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Cobalt  | 1.0 U      | ug/L  | 4.0     | 1.0      | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Copper  | 10 U       | ug/L  | 40      | 10       | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Iron  | 260 I      | ug/L  | 800     | 200      | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Lead  | 3.0 U      | ug/L  | 12      | 3.0      | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Magnesium   | 3.0        | mg/L  | 0.40    | 0.10     | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Nickel  | 10 U       | ug/L  | 40      | 10       | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Silver  | 8.0 U      | ug/L  | 32      | 8.0      | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Total Hardness (as CaCO3)                           | 98         | mg/L  | 0.16    | 0.10     | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| Vanadium  | 5.1 I      | ug/L  | 8.0     | 2.0      | 1  | 03/02/2022 09:33 | 03/04/2022 14:08 | J   |
| Zinc  | 50 U       | ug/L  | 200     | 50       | 1  | 03/02/2022 09:33 | 03/03/2022 19:04 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>            |            |       |         |          |    |                  |                  |     |
| Antimony  | 1.0 U      | ug/L  | 4.0     | 1.0      | 1  | 02/24/2022 04:00 | 02/24/2022 15:09 | J   |
| Selenium  | 1.2 U      | ug/L  | 5.0     | 1.2      | 1  | 02/24/2022 04:00 | 02/24/2022 15:09 | J   |
| Thallium  | 0.25 U     | ug/L  | 1.0     | 0.25     | 1  | 02/24/2022 04:00 | 02/24/2022 15:09 | J   |
| <b>Microbiology (COLILERT-18 (Fecal Coliforms))</b> |            |       |         |          |    |                  |                  |     |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333028      **Date Collected:** 02/22/2022 07:05      **Matrix:** Water  
**Sample ID:** SW-5      **Date Received:** 02/22/2022 10:10

| Parameter  | Results | Units      | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|------------|------|-------|----|------------------|------------------|-----|
| Coliform Fecal                                     | 10 U    | MPN/100 mL | 10   | 10    | 10 | 02/22/2022 14:25 | 02/22/2022 14:25 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |            |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L       | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 03/04/2022 00:19 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L       | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 03/04/2022 00:19 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |            |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,1,1,2-Tetrachloroethane                          | 0.20 U  | ug/L       | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,1,2-Trichloroethane                              | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,1-Dichloroethane                                 | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,1-Dichloroethylene                               | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,2,3-Trichloropropane                             | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,2-Dichlorobenzene                                | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,2-Dichloroethane                                 | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,2-Dichloropropane                                | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 1,4-Dichlorobenzene                                | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 2-Butanone (MEK)                                   | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 2-Hexanone   | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| 4-Methyl-2-pentanone (MIBK)                        | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Acetone  | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Acrylonitrile                                      | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Benzene  | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Bromochloromethane                                 | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Bromodichloromethane                               | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Bromoform  | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Bromomethane                                       | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Carbon Disulfide                                   | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333028      **Date Collected:** 02/22/2022 07:05      **Matrix:** Water  
**Sample ID:** SW-5      **Date Received:** 02/22/2022 10:10

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 06:54 | J   |

**WET CHEMISTRY (Calculation)**

|                |      |      |     |      |   |                  |                  |   |
|----------------|------|------|-----|------|---|------------------|------------------|---|
| Total Nitrogen | 2.22 | mg/L | 0.2 | 0.12 | 1 | 03/07/2022 14:11 | 03/07/2022 14:11 | G |
|----------------|------|------|-----|------|---|------------------|------------------|---|

**WET CHEMISTRY (Copper Sulfate Digestion/EPA 351.2)**

|                         |       |      |     |      |   |                  |                  |   |
|-------------------------|-------|------|-----|------|---|------------------|------------------|---|
| Total Kjeldahl Nitrogen | 0.946 | mg/L | 0.5 | 0.20 | 1 | 03/02/2022 17:15 | 03/03/2022 10:29 | G |
|-------------------------|-------|------|-----|------|---|------------------|------------------|---|

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333028      **Date Collected:** 02/22/2022 07:05      **Matrix:** Water  
**Sample ID:** SW-5      **Date Received:** 02/22/2022 10:10

| Parameter   | Results  | Units | PQL  | MDL    | DF | Prepared         | Analyzed         | Lab |
|---|----------|-------|------|--------|----|------------------|------------------|-----|
| <b>WET CHEMISTRY (Copper Sulfate Digestion/EPA 365.4)</b> |          |       |      |        |    |                  |                  |     |
| Total Phosphorus (as P)                                   | 0.50 I   | mg/L  | 1    | 0.50   | 1  | 03/02/2022 17:15 | 03/03/2022 10:29 | G   |
| <b>WET CHEMISTRY (DEP SOP 10/03/83)</b>                   |          |       |      |        |    |                  |                  |     |
| Unionized Ammonia   | 0.0006 I | mg/L  | 0.05 | 0.0002 | 1  | 03/07/2022 09:29 | 03/07/2022 09:29 | G   |
| <b>WET CHEMISTRY (EPA 300.0)</b>                          |          |       |      |        |    |                  |                  |     |
| Nitrate (as N)  | 1        | mg/L  | 0.8  | 0.20   | 1  | 02/23/2022 15:57 | 02/23/2022 15:57 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>                          |          |       |      |        |    |                  |                  |     |
| Ammonia (N)   | 0.04     | mg/L  | 0.04 | 0.02   | 1  | 02/28/2022 12:01 | 02/28/2022 12:01 | G   |
| <b>WET CHEMISTRY (EPA 410.4)</b>                          |          |       |      |        |    |                  |                  |     |
| Chemical Oxygen Demand                                    | 43       | mg/L  | 20   | 10     | 1  | 02/24/2022 15:56 | 02/24/2022 15:56 | G   |
| <b>WET CHEMISTRY (SM 10200 H)</b>                         |          |       |      |        |    |                  |                  |     |
| Corrected Chlorophyll A                                   | 2.5 U    | mg/m3 | 3    | 2.5    | 1  | 03/01/2022 12:00 | 03/01/2022 12:00 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>                          |          |       |      |        |    |                  |                  |     |
| Total Dissolved Solids                                    | 196      | mg/L  | 10   | 10     | 1  | 02/28/2022 17:40 | 02/28/2022 17:40 | J   |
| <b>WET CHEMISTRY (SM 2540D)</b>                           |          |       |      |        |    |                  |                  |     |
| Total Suspended Solids                                    | 9.0      | mg/L  | 2    | 2.0    | 1  | 02/28/2022 16:35 | 02/28/2022 16:35 | J   |
| <b>WET CHEMISTRY (SM 4500NO3-F)</b>                       |          |       |      |        |    |                  |                  |     |
| Nitrate + Nitrite   | 1.27     | mg/L  | 0.4  | 0.2    | 2  | 02/25/2022 12:25 | 02/25/2022 12:25 | G   |
| <b>WET CHEMISTRY (SM 5210B)</b>                           |          |       |      |        |    |                  |                  |     |
| Biochemical Oxygen Demand                                 | 21       | mg/L  | 2    | 2.0    | 1  | 02/23/2022 08:43 | 02/23/2022 08:43 | J   |
| <b>WET CHEMISTRY (SM 5310B)</b>                           |          |       |      |        |    |                  |                  |     |
| Total Organic Carbon                                      | 11       | mg/L  | 2    | 1.0    | 1  | 02/24/2022 10:53 | 02/24/2022 10:53 | G   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Analysis Results Comments**

**1,2-Dibromo-3-Chloropropane**

See Case Narration

**Biochemical Oxygen Demand**

J3|Lab QC Failure

J4|Estimated Result

**Corrected Chlorophyll A**

samples J2202333028-33 filtered on 2/23/2022 at 13:27

**Total Dissolved Solids**

J4|Estimated Result

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 56           | 112            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 63           | 125            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 103            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 103            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333029      **Date Collected:** 02/22/2022 06:50      **Matrix:** Water  
**Sample ID:** SW-6      **Date Received:** 02/22/2022 10:10

| Parameter   | Results    | Units | PQL         | MDL          | DF | Prepared         | Analyzed         | Lab |
|---|------------|-------|-------------|--------------|----|------------------|------------------|-----|
| <b>FIELD PARAMETERS (Field Measurements)</b>        |            |       |             |              |    |                  |                  |     |
| Temperature   | 17.4       | °C    |             |              | 1  | 03/07/2022 09:31 | 03/07/2022 09:31 | J   |
| pH  | 6.85       | SU    |             |              | 1  | 03/07/2022 09:31 | 03/07/2022 09:31 | J   |
| <b>METALS (EPA 245.1)</b>                           |            |       |             |              |    |                  |                  |     |
| Mercury   | 0.000021 I | mg/L  | 0.0001<br>0 | 0.0000<br>11 | 1  | 02/28/2022 09:40 | 02/28/2022 13:55 | J   |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>            |            |       |             |              |    |                  |                  |     |
| Arsenic   | 8.0 U      | ug/L  | 32          | 8.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Barium  | 38         | ug/L  | 12          | 3.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Beryllium   | 2.0 U      | ug/L  | 8.0         | 2.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Cadmium   | 0.50 U     | ug/L  | 2.0         | 0.50         | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Calcium   | 34         | mg/L  | 0.80        | 0.20         | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Chromium  | 5.0 U      | ug/L  | 20          | 5.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Cobalt  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Copper  | 10 U       | ug/L  | 40          | 10           | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Iron  | 320 I      | ug/L  | 800         | 200          | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Lead  | 3.9 I      | ug/L  | 12          | 3.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Magnesium   | 3.1        | mg/L  | 0.40        | 0.10         | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Nickel  | 10 U       | ug/L  | 40          | 10           | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Silver  | 8.0 U      | ug/L  | 32          | 8.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Total Hardness (as CaCO3)                           | 97         | mg/L  | 0.16        | 0.10         | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| Vanadium  | 6.0 I      | ug/L  | 8.0         | 2.0          | 1  | 03/02/2022 09:33 | 03/04/2022 14:12 | J   |
| Zinc  | 50 U       | ug/L  | 200         | 50           | 1  | 03/02/2022 09:33 | 03/03/2022 19:08 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>            |            |       |             |              |    |                  |                  |     |
| Antimony  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 02/24/2022 04:00 | 02/24/2022 15:38 | J   |
| Selenium  | 1.2 U      | ug/L  | 5.0         | 1.2          | 1  | 02/24/2022 04:00 | 02/24/2022 15:38 | J   |
| Thallium  | 0.25 U     | ug/L  | 1.0         | 0.25         | 1  | 02/24/2022 04:00 | 02/24/2022 15:38 | J   |
| <b>Microbiology (COLILERT-18 (Fecal Coliforms))</b> |            |       |             |              |    |                  |                  |     |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333029      **Date Collected:** 02/22/2022 06:50      **Matrix:** Water  
**Sample ID:** SW-6      **Date Received:** 02/22/2022 10:10

| Parameter      | Results | Units      | PQL | MDL | DF | Prepared         | Analyzed         | Lab |
|----------------|---------|------------|-----|-----|----|------------------|------------------|-----|
| Coliform Fecal | 31      | MPN/100 mL | 10  | 10  | 10 | 02/22/2022 14:25 | 02/22/2022 14:25 | J   |

**VOLATILES (SW-846 5030B/SW-846 8260B (SIM))**

|                             |         |      |      |       |   |                  |                  |   |
|-----------------------------|---------|------|------|-------|---|------------------|------------------|---|
| 1,2-Dibromo-3-Chloropropane | 0.050 U | ug/L | 0.20 | 0.050 | 1 | 02/23/2022 16:31 | 03/04/2022 00:43 | J |
| Ethylene Dibromide (EDB)    | 0.019 U | ug/L | 0.10 | 0.019 | 1 | 02/23/2022 16:31 | 03/04/2022 00:43 | J |

**VOLATILES (SW-846 5030B/SW-846 8260B)**

|                             |        |      |     |      |   |                  |                  |   |
|-----------------------------|--------|------|-----|------|---|------------------|------------------|---|
| 1,1,1,2-Tetrachloroethane   | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,1,1-Trichloroethane       | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,1,1,2-Tetrachloroethane   | 0.20 U | ug/L | 1.0 | 0.20 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,1,2-Trichloroethane       | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,1-Dichloroethane          | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,1-Dichloroethylene        | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,2,3-Trichloropropane      | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,2-Dichlorobenzene         | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,2-Dichloroethane          | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,2-Dichloropropane         | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 1,4-Dichlorobenzene         | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 2-Butanone (MEK)            | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 2-Hexanone                  | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| Acetone                     | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| Acrylonitrile               | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| Benzene                     | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| Bromochloromethane          | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| Bromodichloromethane        | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| Bromoform                   | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| Bromomethane                | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |
| Carbon Disulfide            | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 07:18 | J |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333029      **Date Collected:** 02/22/2022 06:50      **Matrix:** Water  
**Sample ID:** SW-6      **Date Received:** 02/22/2022 10:10

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:18 | J   |

**WET CHEMISTRY (Calculation)**

|                |             |      |     |      |   |                  |                  |   |
|----------------|-------------|------|-----|------|---|------------------|------------------|---|
| Total Nitrogen | <b>3.09</b> | mg/L | 0.2 | 0.12 | 1 | 03/07/2022 14:12 | 03/07/2022 14:12 | G |
|----------------|-------------|------|-----|------|---|------------------|------------------|---|

**WET CHEMISTRY (Copper Sulfate Digestion/EPA 351.2)**

|                         |             |      |     |      |   |                  |                  |   |
|-------------------------|-------------|------|-----|------|---|------------------|------------------|---|
| Total Kjeldahl Nitrogen | <b>1.25</b> | mg/L | 0.5 | 0.20 | 1 | 03/02/2022 17:15 | 03/03/2022 10:29 | G |
|-------------------------|-------------|------|-----|------|---|------------------|------------------|---|

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333029      **Date Collected:** 02/22/2022 06:50      **Matrix:** Water  
**Sample ID:** SW-6      **Date Received:** 02/22/2022 10:10

| Parameter   | Results  | Units | PQL  | MDL         | DF | Prepared         | Analyzed         | Lab |
|---|----------|-------|------|-------------|----|------------------|------------------|-----|
| <b>WET CHEMISTRY (Copper Sulfate Digestion/EPA 365.4)</b> |          |       |      |             |    |                  |                  |     |
| Total Phosphorus (as P)                                   | 0.50 U   | mg/L  | 1    | 0.50        | 1  | 03/02/2022 17:15 | 03/03/2022 10:29 | G   |
| <b>WET CHEMISTRY (DEP SOP 10/03/83)</b>                   |          |       |      |             |    |                  |                  |     |
| Unionized Ammonia   | 0.0006 I | mg/L  | 0.05 | 0.0000<br>5 | 1  | 03/07/2022 09:31 | 03/07/2022 09:31 | G   |
| <b>WET CHEMISTRY (EPA 300.0)</b>                          |          |       |      |             |    |                  |                  |     |
| Nitrate (as N)  | 1        | mg/L  | 0.8  | 0.20        | 1  | 02/23/2022 16:20 | 02/23/2022 16:20 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>                          |          |       |      |             |    |                  |                  |     |
| Ammonia (N)   | 0.2      | mg/L  | 0.04 | 0.02        | 1  | 02/28/2022 12:11 | 02/28/2022 12:11 | G   |
| <b>WET CHEMISTRY (EPA 410.4)</b>                          |          |       |      |             |    |                  |                  |     |
| Chemical Oxygen Demand                                    | 56       | mg/L  | 20   | 10          | 1  | 02/24/2022 15:56 | 02/24/2022 15:56 | G   |
| <b>WET CHEMISTRY (SM 10200 H)</b>                         |          |       |      |             |    |                  |                  |     |
| Corrected Chlorophyll A                                   | 25       | mg/m3 | 3    | 2.5         | 1  | 03/01/2022 12:00 | 03/01/2022 12:00 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>                          |          |       |      |             |    |                  |                  |     |
| Total Dissolved Solids                                    | 210      | mg/L  | 10   | 10          | 1  | 02/28/2022 17:40 | 02/28/2022 17:40 | J   |
| <b>WET CHEMISTRY (SM 2540D)</b>                           |          |       |      |             |    |                  |                  |     |
| Total Suspended Solids                                    | 2.0      | mg/L  | 2    | 2.0         | 1  | 02/28/2022 16:35 | 02/28/2022 16:35 | J   |
| <b>WET CHEMISTRY (SM 4500NO3-F)</b>                       |          |       |      |             |    |                  |                  |     |
| Nitrate + Nitrite   | 1.84     | mg/L  | 0.4  | 0.2         | 2  | 02/25/2022 12:26 | 02/25/2022 12:26 | G   |
| <b>WET CHEMISTRY (SM 5210B)</b>                           |          |       |      |             |    |                  |                  |     |
| Biochemical Oxygen Demand                                 | 2.0 U    | mg/L  | 2    | 2.0         | 1  | 02/23/2022 08:46 | 02/23/2022 08:46 | J   |
| <b>WET CHEMISTRY (SM 5310B)</b>                           |          |       |      |             |    |                  |                  |     |
| Total Organic Carbon                                      | 11       | mg/L  | 2    | 1.0         | 1  | 02/24/2022 11:04 | 02/24/2022 11:04 | G   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

## Analytical Results

### Analysis Results Comments

#### 1,2-Dibromo-3-Chloropropane

See Case Narration

#### Biochemical Oxygen Demand

J3|Lab QC Failure

J4|Estimated Result

### Surrogates

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 54           | 108            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 109            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 61           | 122            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 104            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 107            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333030      **Date Collected:** 02/22/2022 07:25      **Matrix:** Water  
**Sample ID:** SW-7      **Date Received:** 02/22/2022 10:10

| Parameter   | Results    | Units | PQL         | MDL          | DF | Prepared         | Analyzed         | Lab |
|---|------------|-------|-------------|--------------|----|------------------|------------------|-----|
| <b>FIELD PARAMETERS (Field Measurements)</b>        |            |       |             |              |    |                  |                  |     |
| Temperature   | 15.8       | °C    |             |              | 1  | 03/07/2022 09:32 | 03/07/2022 09:32 | J   |
| pH  | 6.94       | SU    |             |              | 1  | 03/07/2022 09:32 | 03/07/2022 09:32 | J   |
| <b>METALS (EPA 245.1)</b>                           |            |       |             |              |    |                  |                  |     |
| Mercury   | 0.000021 I | mg/L  | 0.0001<br>0 | 0.0000<br>11 | 1  | 02/28/2022 09:40 | 02/28/2022 13:59 | J   |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>            |            |       |             |              |    |                  |                  |     |
| Arsenic   | 11 I       | ug/L  | 32          | 8.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Barium  | 16         | ug/L  | 12          | 3.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Beryllium   | 2.0 U      | ug/L  | 8.0         | 2.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Cadmium   | 0.50 U     | ug/L  | 2.0         | 0.50         | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Calcium   | 16         | mg/L  | 0.80        | 0.20         | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Chromium  | 5.0 U      | ug/L  | 20          | 5.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Cobalt  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Copper  | 10 U       | ug/L  | 40          | 10           | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Iron  | 820        | ug/L  | 800         | 200          | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Lead  | 3.0 U      | ug/L  | 12          | 3.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Magnesium   | 1.4        | mg/L  | 0.40        | 0.10         | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Nickel  | 10 U       | ug/L  | 40          | 10           | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Silver  | 8.0 U      | ug/L  | 32          | 8.0          | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Total Hardness (as CaCO3)                           | 46         | mg/L  | 0.16        | 0.10         | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| Vanadium  | 3.9 I      | ug/L  | 8.0         | 2.0          | 1  | 03/02/2022 09:33 | 03/04/2022 14:29 | J   |
| Zinc  | 50 U       | ug/L  | 200         | 50           | 1  | 03/02/2022 09:33 | 03/03/2022 19:12 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>            |            |       |             |              |    |                  |                  |     |
| Antimony  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 02/24/2022 04:00 | 02/24/2022 15:44 | J   |
| Selenium  | 1.2 U      | ug/L  | 5.0         | 1.2          | 1  | 02/24/2022 04:00 | 02/24/2022 15:44 | J   |
| Thallium  | 0.25 U     | ug/L  | 1.0         | 0.25         | 1  | 02/24/2022 04:00 | 02/24/2022 15:44 | J   |
| <b>Microbiology (COLILERT-18 (Fecal Coliforms))</b> |            |       |             |              |    |                  |                  |     |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333030      **Date Collected:** 02/22/2022 07:25      **Matrix:** Water  
**Sample ID:** SW-7      **Date Received:** 02/22/2022 10:10

| Parameter  | Results | Units      | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|------------|------|-------|----|------------------|------------------|-----|
| Coliform Fecal                                     | 583     | MPN/100 mL | 10   | 10    | 10 | 02/22/2022 14:25 | 02/22/2022 14:25 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |            |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L       | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L       | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |            |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U  | ug/L       | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,1,2-Trichloroethane                              | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,1-Dichloroethane                                 | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,1-Dichloroethylene                               | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,2,3-Trichloropropane                             | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,2-Dichlorobenzene                                | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,2-Dichloroethane                                 | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,2-Dichloropropane                                | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 1,4-Dichlorobenzene                                | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 2-Butanone (MEK)                                   | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 2-Hexanone   | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| 4-Methyl-2-pentanone (MIBK)                        | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Acetone  | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Acrylonitrile                                      | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Benzene  | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Bromochloromethane                                 | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Bromodichloromethane                               | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Bromoform  | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Bromomethane                                       | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Carbon Disulfide                                   | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333030      **Date Collected:** 02/22/2022 07:25      **Matrix:** Water  
**Sample ID:** SW-7      **Date Received:** 02/22/2022 10:10

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 07:42 | J   |

**WET CHEMISTRY (Calculation)**

|                |              |      |     |      |   |                  |                  |   |
|----------------|--------------|------|-----|------|---|------------------|------------------|---|
| Total Nitrogen | <b>0.666</b> | mg/L | 0.2 | 0.12 | 1 | 03/07/2022 14:12 | 03/07/2022 14:12 | G |
|----------------|--------------|------|-----|------|---|------------------|------------------|---|

**WET CHEMISTRY (Copper Sulfate Digestion/EPA 351.2)**

|                         |              |      |     |      |   |                  |                  |   |
|-------------------------|--------------|------|-----|------|---|------------------|------------------|---|
| Total Kjeldahl Nitrogen | <b>0.556</b> | mg/L | 0.5 | 0.20 | 1 | 03/02/2022 17:15 | 03/03/2022 10:29 | G |
|-------------------------|--------------|------|-----|------|---|------------------|------------------|---|





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333030      **Date Collected:** 02/22/2022 07:25      **Matrix:** Water  
**Sample ID:** SW-7      **Date Received:** 02/22/2022 10:10

| Parameter   | Results  | Units | PQL  | MDL         | DF | Prepared         | Analyzed         | Lab |
|---|----------|-------|------|-------------|----|------------------|------------------|-----|
| <b>WET CHEMISTRY (Copper Sulfate Digestion/EPA 365.4)</b> |          |       |      |             |    |                  |                  |     |
| Total Phosphorus (as P)                                   | 0.50 U   | mg/L  | 1    | 0.50        | 1  | 03/02/2022 17:15 | 03/03/2022 10:29 | G   |
| <b>WET CHEMISTRY (DEP SOP 10/03/83)</b>                   |          |       |      |             |    |                  |                  |     |
| Unionized Ammonia   | 0.0001 I | mg/L  | 0.05 | 0.0000<br>5 | 1  | 03/07/2022 09:33 | 03/07/2022 09:33 | G   |
| <b>WET CHEMISTRY (EPA 300.0)</b>                          |          |       |      |             |    |                  |                  |     |
| Nitrate (as N)  | 0.20 U   | mg/L  | 0.8  | 0.20        | 1  | 02/23/2022 16:43 | 02/23/2022 16:43 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>                          |          |       |      |             |    |                  |                  |     |
| Ammonia (N)   | 0.04 I   | mg/L  | 0.04 | 0.02        | 1  | 02/28/2022 12:15 | 02/28/2022 12:15 | G   |
| <b>WET CHEMISTRY (EPA 410.4)</b>                          |          |       |      |             |    |                  |                  |     |
| Chemical Oxygen Demand                                    | 75       | mg/L  | 20   | 10          | 1  | 02/24/2022 15:56 | 02/24/2022 15:56 | G   |
| <b>WET CHEMISTRY (SM 10200 H)</b>                         |          |       |      |             |    |                  |                  |     |
| Corrected Chlorophyll A                                   | 2.5 U    | mg/m3 | 3    | 2.5         | 1  | 03/01/2022 12:00 | 03/01/2022 12:00 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>                          |          |       |      |             |    |                  |                  |     |
| Total Dissolved Solids                                    | 115      | mg/L  | 10   | 10          | 1  | 02/28/2022 17:40 | 02/28/2022 17:40 | J   |
| <b>WET CHEMISTRY (SM 2540D)</b>                           |          |       |      |             |    |                  |                  |     |
| Total Suspended Solids                                    | 8.0      | mg/L  | 2    | 2.0         | 1  | 02/28/2022 16:35 | 02/28/2022 16:35 | J   |
| <b>WET CHEMISTRY (SM 4500NO3-F)</b>                       |          |       |      |             |    |                  |                  |     |
| Nitrate + Nitrite   | 0.2 U    | mg/L  | 0.4  | 0.2         | 2  | 02/25/2022 12:27 | 02/25/2022 12:27 | G   |
| <b>WET CHEMISTRY (SM 5210B)</b>                           |          |       |      |             |    |                  |                  |     |
| Biochemical Oxygen Demand                                 | 8.9      | mg/L  | 2    | 2.0         | 1  | 02/23/2022 08:48 | 02/23/2022 08:48 | J   |
| <b>WET CHEMISTRY (SM 5310B)</b>                           |          |       |      |             |    |                  |                  |     |
| Total Organic Carbon                                      | 18       | mg/L  | 2    | 1.0         | 1  | 02/24/2022 11:16 | 02/24/2022 11:16 | G   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Analysis Results Comments**

**Biochemical Oxygen Demand**

J3|Lab QC Failure

J4|Estimated Result

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 105            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 109            | 86 - 123       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 106            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 101            | 77 - 125       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333031      **Date Collected:** 02/22/2022 07:50      **Matrix:** Water  
**Sample ID:** SW-4      **Date Received:** 02/22/2022 10:10

| Parameter   | Results    | Units | PQL         | MDL          | DF | Prepared         | Analyzed         | Lab |
|---|------------|-------|-------------|--------------|----|------------------|------------------|-----|
| <b>FIELD PARAMETERS (Field Measurements)</b>        |            |       |             |              |    |                  |                  |     |
| Temperature   | 15.2       | °C    |             |              | 1  | 03/07/2022 09:34 | 03/07/2022 09:34 | J   |
| pH  | 7.02       | SU    |             |              | 1  | 03/07/2022 09:34 | 03/07/2022 09:34 | J   |
| <b>METALS (EPA 245.1)</b>                           |            |       |             |              |    |                  |                  |     |
| Mercury   | 0.000025 I | mg/L  | 0.0001<br>0 | 0.0000<br>11 | 1  | 02/28/2022 09:40 | 02/28/2022 14:04 | J   |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>            |            |       |             |              |    |                  |                  |     |
| Arsenic   | 8.0 U      | ug/L  | 32          | 8.0          | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Barium  | 15         | ug/L  | 12          | 3.0          | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Beryllium   | 2.0 U      | ug/L  | 8.0         | 2.0          | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Cadmium   | 0.50 U     | ug/L  | 2.0         | 0.50         | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Calcium   | 31         | mg/L  | 0.80        | 0.20         | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Chromium  | 5.0 U      | ug/L  | 20          | 5.0          | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Cobalt  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Copper  | 10 U       | ug/L  | 40          | 10           | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Iron  | 300 I      | ug/L  | 800         | 200          | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Lead  | 3.0 U      | ug/L  | 12          | 3.0          | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Magnesium   | 1.7        | mg/L  | 0.40        | 0.10         | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Nickel  | 10 U       | ug/L  | 40          | 10           | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Silver  | 8.0 U      | ug/L  | 32          | 8.0          | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Total Hardness (as CaCO3)                           | 85         | mg/L  | 0.16        | 0.10         | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Vanadium  | 2.0 U      | ug/L  | 8.0         | 2.0          | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| Zinc  | 50 U       | ug/L  | 200         | 50           | 1  | 03/04/2022 03:00 | 03/04/2022 17:33 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>            |            |       |             |              |    |                  |                  |     |
| Antimony  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 02/24/2022 04:00 | 02/24/2022 15:49 | J   |
| Selenium  | 1.2 U      | ug/L  | 5.0         | 1.2          | 1  | 02/24/2022 04:00 | 02/24/2022 15:49 | J   |
| Thallium  | 0.25 U     | ug/L  | 1.0         | 0.25         | 1  | 02/24/2022 04:00 | 02/24/2022 15:49 | J   |
| <b>Microbiology (COLILERT-18 (Fecal Coliforms))</b> |            |       |             |              |    |                  |                  |     |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333031      **Date Collected:** 02/22/2022 07:50      **Matrix:** Water  
**Sample ID:** SW-4      **Date Received:** 02/22/2022 10:10

| Parameter      | Results | Units      | PQL | MDL | DF | Prepared         | Analyzed         | Lab |
|----------------|---------|------------|-----|-----|----|------------------|------------------|-----|
| Coliform Fecal | 10 U    | MPN/100 mL | 10  | 10  | 10 | 02/22/2022 14:25 | 02/22/2022 14:25 | J   |

**VOLATILES (SW-846 5030B/SW-846 8260B (SIM))**

|                             |         |      |      |       |   |                  |                  |   |
|-----------------------------|---------|------|------|-------|---|------------------|------------------|---|
| 1,2-Dibromo-3-Chloropropane | 0.050 U | ug/L | 0.20 | 0.050 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| Ethylene Dibromide (EDB)    | 0.019 U | ug/L | 0.10 | 0.019 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |

**VOLATILES (SW-846 5030B/SW-846 8260B)**

|                             |        |      |     |      |   |                  |                  |   |
|-----------------------------|--------|------|-----|------|---|------------------|------------------|---|
| 1,1,1,2-Tetrachloroethane   | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,1,1-Trichloroethane       | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,1,1,2-Tetrachloroethane   | 0.20 U | ug/L | 1.0 | 0.20 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,1,2-Trichloroethane       | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,1-Dichloroethane          | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,1-Dichloroethylene        | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,2,3-Trichloropropane      | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,2-Dichlorobenzene         | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,2-Dichloroethane          | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,2-Dichloropropane         | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 1,4-Dichlorobenzene         | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 2-Butanone (MEK)            | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 2-Hexanone                  | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| Acetone                     | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| Acrylonitrile               | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| Benzene                     | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| Bromochloromethane          | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| Bromodichloromethane        | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| Bromoform                   | 0.25 U | ug/L | 1.0 | 0.25 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| Bromomethane                | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |
| Carbon Disulfide            | 0.50 U | ug/L | 2.0 | 0.50 | 1 | 02/23/2022 16:31 | 02/24/2022 08:06 | J |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333031      **Date Collected:** 02/22/2022 07:50      **Matrix:** Water  
**Sample ID:** SW-4      **Date Received:** 02/22/2022 10:10

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:06 | J   |

**WET CHEMISTRY (Calculation)**

|                |        |      |     |      |   |                  |                  |   |
|----------------|--------|------|-----|------|---|------------------|------------------|---|
| Total Nitrogen | 0.12 U | mg/L | 0.2 | 0.12 | 1 | 03/07/2022 14:13 | 03/07/2022 14:13 | G |
|----------------|--------|------|-----|------|---|------------------|------------------|---|

**WET CHEMISTRY (Copper Sulfate Digestion/EPA 351.2)**

|                         |        |      |     |      |   |                  |                  |   |
|-------------------------|--------|------|-----|------|---|------------------|------------------|---|
| Total Kjeldahl Nitrogen | 0.20 U | mg/L | 0.5 | 0.20 | 1 | 03/02/2022 17:15 | 03/03/2022 10:29 | G |
|-------------------------|--------|------|-----|------|---|------------------|------------------|---|





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333031      **Date Collected:** 02/22/2022 07:50      **Matrix:** Water  
**Sample ID:** SW-4      **Date Received:** 02/22/2022 10:10

| Parameter   | Results   | Units | PQL  | MDL     | DF | Prepared         | Analyzed         | Lab |
|---|-----------|-------|------|---------|----|------------------|------------------|-----|
| <b>WET CHEMISTRY (Copper Sulfate Digestion/EPA 365.4)</b> |           |       |      |         |    |                  |                  |     |
| Total Phosphorus (as P)                                   | 0.50 U    | mg/L  | 1    | 0.50    | 1  | 03/02/2022 17:15 | 03/03/2022 10:29 | G   |
| <b>WET CHEMISTRY (DEP SOP 10/03/83)</b>                   |           |       |      |         |    |                  |                  |     |
| Unionized Ammonia   | 0.00007 I | mg/L  | 0.05 | 0.00006 | 1  | 03/07/2022 09:34 | 03/07/2022 09:34 | G   |
| <b>WET CHEMISTRY (EPA 300.0)</b>                          |           |       |      |         |    |                  |                  |     |
| Nitrate (as N)  | 0.2 I     | mg/L  | 0.8  | 0.20    | 1  | 02/23/2022 17:06 | 02/23/2022 17:06 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>                          |           |       |      |         |    |                  |                  |     |
| Ammonia (N)   | 0.02 I    | mg/L  | 0.04 | 0.02    | 1  | 02/28/2022 12:16 | 02/28/2022 12:16 | G   |
| <b>WET CHEMISTRY (EPA 410.4)</b>                          |           |       |      |         |    |                  |                  |     |
| Chemical Oxygen Demand                                    | 30        | mg/L  | 20   | 10      | 1  | 02/24/2022 15:56 | 02/24/2022 15:56 | G   |
| <b>WET CHEMISTRY (SM 10200 H)</b>                         |           |       |      |         |    |                  |                  |     |
| Corrected Chlorophyll A                                   | 2.5 U     | mg/m3 | 3    | 2.5     | 1  | 03/01/2022 14:00 | 03/01/2022 14:00 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>                          |           |       |      |         |    |                  |                  |     |
| Total Dissolved Solids                                    | 128       | mg/L  | 10   | 10      | 1  | 02/28/2022 17:40 | 02/28/2022 17:40 | J   |
| <b>WET CHEMISTRY (SM 2540D)</b>                           |           |       |      |         |    |                  |                  |     |
| Total Suspended Solids                                    | 3.0       | mg/L  | 2    | 2.0     | 1  | 02/28/2022 16:35 | 02/28/2022 16:35 | J   |
| <b>WET CHEMISTRY (SM 4500NO3-F)</b>                       |           |       |      |         |    |                  |                  |     |
| Nitrate + Nitrite   | 0.2 U     | mg/L  | 0.4  | 0.2     | 2  | 02/25/2022 12:32 | 02/25/2022 12:32 | G   |
| <b>WET CHEMISTRY (SM 5210B)</b>                           |           |       |      |         |    |                  |                  |     |
| Biochemical Oxygen Demand                                 | 10        | mg/L  | 2    | 2.0     | 1  | 02/23/2022 09:15 | 02/23/2022 09:15 | J   |
| <b>WET CHEMISTRY (SM 5310B)</b>                           |           |       |      |         |    |                  |                  |     |
| Total Organic Carbon                                      | 8         | mg/L  | 2    | 1.0     | 1  | 02/24/2022 11:28 | 02/24/2022 11:28 | G   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

### Task Comments

#### 2657683 - WCAg/5609

filters extracted on 3/1/2022 at 10:00

### Analysis Results Comments

#### Biochemical Oxygen Demand

J3|Lab QC Failure

J4|Estimated Result

#### Corrected Chlorophyll A

samples J2202333031-33 filtered on 2/23/2022 at 13:27

#### Total Kjeldahl Nitrogen

J4|Estimated Result

#### Total Phosphorus (as P)

J4|Estimated Result

### Surrogates

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 100            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 109            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 105            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333032      **Date Collected:** 02/22/2022 08:20      **Matrix:** Water  
**Sample ID:** SW-3      **Date Received:** 02/22/2022 10:10

| Parameter   | Results    | Units | PQL         | MDL          | DF | Prepared         | Analyzed         | Lab |
|---|------------|-------|-------------|--------------|----|------------------|------------------|-----|
| <b>FIELD PARAMETERS (Field Measurements)</b>        |            |       |             |              |    |                  |                  |     |
| Temperature   | 17.2       | °C    |             |              | 1  | 03/07/2022 09:35 | 03/07/2022 09:35 | J   |
| pH  | 7.74       | SU    |             |              | 1  | 03/07/2022 09:35 | 03/07/2022 09:35 | J   |
| <b>METALS (EPA 245.1)</b>                           |            |       |             |              |    |                  |                  |     |
| Mercury   | 0.000027 I | mg/L  | 0.0001<br>0 | 0.0000<br>11 | 1  | 02/28/2022 09:40 | 02/28/2022 14:09 | J   |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>            |            |       |             |              |    |                  |                  |     |
| Arsenic   | 8.0 U      | ug/L  | 32          | 8.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Barium  | 32         | ug/L  | 12          | 3.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Beryllium   | 2.0 U      | ug/L  | 8.0         | 2.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Cadmium   | 0.50 U     | ug/L  | 2.0         | 0.50         | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Calcium   | 53         | mg/L  | 0.80        | 0.20         | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Chromium  | 7.0 I      | ug/L  | 20          | 5.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Cobalt  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Copper  | 10 U       | ug/L  | 40          | 10           | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Iron  | 480 I      | ug/L  | 800         | 200          | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Lead  | 3.2 I      | ug/L  | 12          | 3.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Magnesium   | 5.6        | mg/L  | 0.40        | 0.10         | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Nickel  | 10 U       | ug/L  | 40          | 10           | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Silver  | 8.0 U      | ug/L  | 32          | 8.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Total Hardness (as CaCO3)                           | 150        | mg/L  | 0.16        | 0.10         | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Vanadium  | 3.9 I      | ug/L  | 8.0         | 2.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| Zinc  | 50 U       | ug/L  | 200         | 50           | 1  | 03/04/2022 03:00 | 03/04/2022 18:02 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>            |            |       |             |              |    |                  |                  |     |
| Antimony  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 02/24/2022 04:00 | 02/24/2022 15:54 | J   |
| Selenium  | 1.2 U      | ug/L  | 5.0         | 1.2          | 1  | 02/24/2022 04:00 | 02/24/2022 15:54 | J   |
| Thallium  | 0.25 U     | ug/L  | 1.0         | 0.25         | 1  | 02/24/2022 04:00 | 02/24/2022 15:54 | J   |
| <b>Microbiology (COLILERT-18 (Fecal Coliforms))</b> |            |       |             |              |    |                  |                  |     |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333032      **Date Collected:** 02/22/2022 08:20      **Matrix:** Water  
**Sample ID:** SW-3      **Date Received:** 02/22/2022 10:10

| Parameter  | Results | Units      | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|------------|------|-------|----|------------------|------------------|-----|
| Coliform Fecal                                     | 31      | MPN/100 mL | 10   | 10    | 10 | 02/22/2022 14:25 | 02/22/2022 14:25 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |            |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L       | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L       | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |            |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U  | ug/L       | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,1,2-Trichloroethane                              | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,1-Dichloroethane                                 | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,1-Dichloroethylene                               | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,2,3-Trichloropropane                             | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,2-Dichlorobenzene                                | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,2-Dichloroethane                                 | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,2-Dichloropropane                                | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 1,4-Dichlorobenzene                                | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 2-Butanone (MEK)                                   | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 2-Hexanone   | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| 4-Methyl-2-pentanone (MIBK)                        | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Acetone  | 4.8     | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Acrylonitrile                                      | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Benzene  | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Bromochloromethane                                 | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Bromodichloromethane                               | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Bromoform  | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Bromomethane                                       | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Carbon Disulfide                                   | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333032      **Date Collected:** 02/22/2022 08:20      **Matrix:** Water  
**Sample ID:** SW-3      **Date Received:** 02/22/2022 10:10

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:30 | J   |

**WET CHEMISTRY (Calculation)**

|                |      |      |     |      |   |                  |                  |   |
|----------------|------|------|-----|------|---|------------------|------------------|---|
| Total Nitrogen | 10.3 | mg/L | 0.2 | 0.12 | 1 | 03/08/2022 14:18 | 03/08/2022 14:18 | G |
|----------------|------|------|-----|------|---|------------------|------------------|---|

**WET CHEMISTRY (Copper Sulfate Digestion/EPA 351.2)**

|                         |      |      |   |      |   |                  |                  |   |
|-------------------------|------|------|---|------|---|------------------|------------------|---|
| Total Kjeldahl Nitrogen | 9.14 | mg/L | 1 | 0.40 | 2 | 03/02/2022 17:15 | 03/03/2022 10:29 | G |
|-------------------------|------|------|---|------|---|------------------|------------------|---|

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333032      **Date Collected:** 02/22/2022 08:20      **Matrix:** Water  
**Sample ID:** SW-3      **Date Received:** 02/22/2022 10:10

| Parameter   | Results | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|-------|----|------------------|------------------|-----|
| <b>WET CHEMISTRY (Copper Sulfate Digestion/EPA 365.4)</b> |         |       |      |       |    |                  |                  |     |
| Total Phosphorus (as P)                                   | 0.50 U  | mg/L  | 1    | 0.50  | 1  | 03/02/2022 17:15 | 03/03/2022 10:29 | G   |
| <b>WET CHEMISTRY (DEP SOP 10/03/83)</b>                   |         |       |      |       |    |                  |                  |     |
| Unionized Ammonia   | 0.2     | mg/L  | 0.05 | 0.009 | 1  | 03/07/2022 09:36 | 03/07/2022 09:36 | G   |
| <b>WET CHEMISTRY (EPA 300.0)</b>                          |         |       |      |       |    |                  |                  |     |
| Nitrate (as N)  | 11      | mg/L  | 2    | 0.40  | 2  | 02/23/2022 13:15 | 02/23/2022 13:15 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>                          |         |       |      |       |    |                  |                  |     |
| Ammonia (N)   | 8       | mg/L  | 1    | 0.4   | 25 | 02/28/2022 14:38 | 02/28/2022 14:38 | G   |
| <b>WET CHEMISTRY (EPA 410.4)</b>                          |         |       |      |       |    |                  |                  |     |
| Chemical Oxygen Demand                                    | 94      | mg/L  | 20   | 10    | 1  | 02/24/2022 15:56 | 02/24/2022 15:56 | G   |
| <b>WET CHEMISTRY (SM 10200 H)</b>                         |         |       |      |       |    |                  |                  |     |
| Corrected Chlorophyll A                                   | 16      | mg/m3 | 3    | 2.5   | 1  | 03/01/2022 14:00 | 03/01/2022 14:00 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>                          |         |       |      |       |    |                  |                  |     |
| Total Dissolved Solids                                    | 345     | mg/L  | 10   | 10    | 1  | 02/28/2022 17:40 | 02/28/2022 17:40 | J   |
| <b>WET CHEMISTRY (SM 2540D)</b>                           |         |       |      |       |    |                  |                  |     |
| Total Suspended Solids                                    | 10      | mg/L  | 2    | 2.0   | 1  | 02/28/2022 16:35 | 02/28/2022 16:35 | J   |
| <b>WET CHEMISTRY (SM 4500NO3-F)</b>                       |         |       |      |       |    |                  |                  |     |
| Nitrate + Nitrite   | 1.18    | mg/L  | 0.4  | 0.2   | 2  | 02/25/2022 12:38 | 02/25/2022 12:38 | G   |
| <b>WET CHEMISTRY (SM 5210B)</b>                           |         |       |      |       |    |                  |                  |     |
| Biochemical Oxygen Demand                                 | 12      | mg/L  | 2    | 2.0   | 1  | 02/23/2022 09:17 | 02/23/2022 09:17 | J   |
| <b>WET CHEMISTRY (SM 5310B)</b>                           |         |       |      |       |    |                  |                  |     |
| Total Organic Carbon                                      | 24      | mg/L  | 2    | 1.0   | 1  | 02/24/2022 11:40 | 02/24/2022 11:40 | G   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

## Analytical Results

### Analysis Results Comments

#### Biochemical Oxygen Demand

J3|Lab QC Failure

J4|Estimated Result

#### Total Suspended Solids

J4|Estimated Result

### Surrogates

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 110            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 106            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 103            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333033      **Date Collected:** 02/22/2022 09:00      **Matrix:** Water  
**Sample ID:** SW-1      **Date Received:** 02/22/2022 10:10

| Parameter   | Results    | Units | PQL         | MDL          | DF | Prepared         | Analyzed         | Lab |
|---|------------|-------|-------------|--------------|----|------------------|------------------|-----|
| <b>FIELD PARAMETERS (Field Measurements)</b>        |            |       |             |              |    |                  |                  |     |
| Temperature   | 16.3       | °C    |             |              | 1  | 03/07/2022 09:36 | 03/07/2022 09:36 | J   |
| pH  | 7.52       | SU    |             |              | 1  | 03/07/2022 09:36 | 03/07/2022 09:36 | J   |
| <b>METALS (EPA 245.1)</b>                           |            |       |             |              |    |                  |                  |     |
| Mercury   | 0.000024 I | mg/L  | 0.0001<br>0 | 0.0000<br>11 | 1  | 02/28/2022 09:40 | 02/28/2022 14:13 | J   |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>            |            |       |             |              |    |                  |                  |     |
| Arsenic   | 11 I       | ug/L  | 32          | 8.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Barium  | 31         | ug/L  | 12          | 3.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Beryllium   | 2.0 U      | ug/L  | 8.0         | 2.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Cadmium   | 0.50 U     | ug/L  | 2.0         | 0.50         | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Calcium   | 30         | mg/L  | 0.80        | 0.20         | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Chromium  | 5.0 U      | ug/L  | 20          | 5.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Cobalt  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Copper  | 10 U       | ug/L  | 40          | 10           | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Iron  | 780 I      | ug/L  | 800         | 200          | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Lead  | 3.0 U      | ug/L  | 12          | 3.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Magnesium   | 3.5        | mg/L  | 0.40        | 0.10         | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Nickel  | 10 U       | ug/L  | 40          | 10           | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Silver  | 8.0 U      | ug/L  | 32          | 8.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Total Hardness (as CaCO3)                           | 88         | mg/L  | 0.16        | 0.10         | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Vanadium  | 2.0 U      | ug/L  | 8.0         | 2.0          | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| Zinc  | 50 U       | ug/L  | 200         | 50           | 1  | 03/04/2022 03:00 | 03/04/2022 18:07 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>            |            |       |             |              |    |                  |                  |     |
| Antimony  | 1.0 U      | ug/L  | 4.0         | 1.0          | 1  | 02/24/2022 04:00 | 02/24/2022 15:59 | J   |
| Selenium  | 1.2 U      | ug/L  | 5.0         | 1.2          | 1  | 02/24/2022 04:00 | 02/24/2022 15:59 | J   |
| Thallium  | 0.25 U     | ug/L  | 1.0         | 0.25         | 1  | 02/24/2022 04:00 | 02/24/2022 15:59 | J   |
| <b>Microbiology (COLILERT-18 (Fecal Coliforms))</b> |            |       |             |              |    |                  |                  |     |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333033      **Date Collected:** 02/22/2022 09:00      **Matrix:** Water  
**Sample ID:** SW-1      **Date Received:** 02/22/2022 10:10

| Parameter  | Results | Units      | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|------------|------|-------|----|------------------|------------------|-----|
| Coliform Fecal                                     | 1890    | MPN/100 mL | 10   | 10    | 10 | 02/22/2022 14:25 | 02/22/2022 14:25 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |            |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L       | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L       | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |            |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,1,1,2-Tetrachloroethane                          | 0.20 U  | ug/L       | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,1,2-Trichloroethane                              | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,1-Dichloroethane                                 | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,1-Dichloroethylene                               | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,2,3-Trichloropropane                             | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,2-Dichlorobenzene                                | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,2-Dichloroethane                                 | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,2-Dichloropropane                                | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 1,4-Dichlorobenzene                                | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 2-Butanone (MEK)                                   | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 2-Hexanone   | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| 4-Methyl-2-pentanone (MIBK)                        | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Acetone  | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Acrylonitrile                                      | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Benzene  | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Bromochloromethane                                 | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Bromodichloromethane                               | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Bromoform  | 0.25 U  | ug/L       | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Bromomethane                                       | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Carbon Disulfide                                   | 0.50 U  | ug/L       | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333033      **Date Collected:** 02/22/2022 09:00      **Matrix:** Water  
**Sample ID:** SW-1      **Date Received:** 02/22/2022 10:10

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 08:54 | J   |

**WET CHEMISTRY (Calculation)**

|                |      |      |     |      |   |                  |                  |   |
|----------------|------|------|-----|------|---|------------------|------------------|---|
| Total Nitrogen | 2.46 | mg/L | 0.2 | 0.12 | 1 | 03/07/2022 14:13 | 03/07/2022 14:13 | G |
|----------------|------|------|-----|------|---|------------------|------------------|---|

**WET CHEMISTRY (Copper Sulfate Digestion/EPA 351.2)**

|                         |      |      |     |      |   |                  |                  |   |
|-------------------------|------|------|-----|------|---|------------------|------------------|---|
| Total Kjeldahl Nitrogen | 1.00 | mg/L | 0.5 | 0.20 | 1 | 03/02/2022 17:15 | 03/03/2022 10:29 | G |
|-------------------------|------|------|-----|------|---|------------------|------------------|---|





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333033      **Date Collected:** 02/22/2022 09:00      **Matrix:** Water  
**Sample ID:** SW-1      **Date Received:** 02/22/2022 10:10

| Parameter   | Results | Units | PQL  | MDL    | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|--------|----|------------------|------------------|-----|
| <b>WET CHEMISTRY (Copper Sulfate Digestion/EPA 365.4)</b> |         |       |      |        |    |                  |                  |     |
| Total Phosphorus (as P)                                   | 0.50 U  | mg/L  | 1    | 0.50   | 1  | 03/02/2022 17:15 | 03/03/2022 10:29 | G   |
| <b>WET CHEMISTRY (DEP SOP 10/03/83)</b>                   |         |       |      |        |    |                  |                  |     |
| Unionized Ammonia   | 0.002 I | mg/L  | 0.05 | 0.0002 | 1  | 03/07/2022 09:37 | 03/07/2022 09:37 | G   |
| <b>WET CHEMISTRY (EPA 300.0)</b>                          |         |       |      |        |    |                  |                  |     |
| Nitrate (as N)  | 0.4 I   | mg/L  | 0.8  | 0.20   | 1  | 02/23/2022 13:38 | 02/23/2022 13:38 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>                          |         |       |      |        |    |                  |                  |     |
| Ammonia (N)   | 0.2     | mg/L  | 0.04 | 0.02   | 1  | 02/28/2022 14:39 | 02/28/2022 14:39 | G   |
| <b>WET CHEMISTRY (EPA 410.4)</b>                          |         |       |      |        |    |                  |                  |     |
| Chemical Oxygen Demand                                    | 62      | mg/L  | 20   | 10     | 1  | 02/24/2022 15:56 | 02/24/2022 15:56 | G   |
| <b>WET CHEMISTRY (SM 10200 H)</b>                         |         |       |      |        |    |                  |                  |     |
| Corrected Chlorophyll A                                   | 2.5 U   | mg/m3 | 3    | 2.5    | 1  | 03/01/2022 14:00 | 03/01/2022 14:00 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>                          |         |       |      |        |    |                  |                  |     |
| Total Dissolved Solids                                    | 209     | mg/L  | 10   | 10     | 1  | 02/28/2022 17:40 | 02/28/2022 17:40 | J   |
| <b>WET CHEMISTRY (SM 2540D)</b>                           |         |       |      |        |    |                  |                  |     |
| Total Suspended Solids                                    | 12      | mg/L  | 2    | 2.0    | 1  | 02/28/2022 16:35 | 02/28/2022 16:35 | J   |
| <b>WET CHEMISTRY (SM 4500NO3-F)</b>                       |         |       |      |        |    |                  |                  |     |
| Nitrate + Nitrite   | 1.46    | mg/L  | 0.4  | 0.2    | 2  | 02/25/2022 12:41 | 02/25/2022 12:41 | G   |
| <b>WET CHEMISTRY (SM 5210B)</b>                           |         |       |      |        |    |                  |                  |     |
| Biochemical Oxygen Demand                                 | 8.3     | mg/L  | 2    | 2.0    | 1  | 02/23/2022 09:20 | 02/23/2022 09:20 | J   |
| <b>WET CHEMISTRY (SM 5310B)</b>                           |         |       |      |        |    |                  |                  |     |
| Total Organic Carbon                                      | 17      | mg/L  | 2    | 1.0    | 1  | 02/24/2022 14:03 | 02/24/2022 14:03 | G   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

### Analysis Results Comments

#### Biochemical Oxygen Demand

J3|Lab QC Failure

J4|Estimated Result

### Surrogates

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 105            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 100            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 110            | 86 - 123       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 105            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 104            | 80 - 129       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333034      **Date Collected:** 02/22/2022 00:00      **Matrix:** Water  
**Sample ID:** Trip Blank 1      **Date Received:** 02/22/2022 10:10

| Parameter  | Results | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|------|-------|----|------------------|------------------|-----|
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U  | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,1,2-Trichloroethane                              | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,1-Dichloroethane                                 | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,1-Dichloroethylene                               | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,2,3-Trichloropropane                             | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,2-Dichlorobenzene                                | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,2-Dichloroethane                                 | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,2-Dichloropropane                                | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 1,4-Dichlorobenzene                                | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 2-Butanone (MEK)                                   | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 2-Hexanone   | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| 4-Methyl-2-pentanone (MIBK)                        | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Acetone  | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Acrylonitrile                                      | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Benzene  | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Bromochloromethane                                 | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Bromodichloromethane                               | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Bromoform  | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Bromomethane                                       | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Carbon Disulfide                                   | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Carbon Tetrachloride                               | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:18 | J   |

Lab ID: J2202333034  
 Sample ID: Trip Blank 1

Date Collected: 02/22/2022 00:00  
 Date Received: 02/22/2022 10:10

Matrix: Water





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 100            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 56           | 112            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 107            | 70 - 128       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 104            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 105            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 105            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333035      **Date Collected:** 02/21/2022 17:30      **Matrix:** Water  
**Sample ID:** EQUIPMENT BLANK 2      **Date Received:** 02/22/2022 10:10

| Parameter  | Results | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |         |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U   | ug/L  | 32   | 8.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Barium   | 3.0 U   | ug/L  | 12   | 3.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Beryllium  | 2.0 U   | ug/L  | 8.0  | 2.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Cadmium  | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Chromium   | 5.0 U   | ug/L  | 20   | 5.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Cobalt   | 1.0 U   | ug/L  | 4.0  | 1.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Copper   | 10 U    | ug/L  | 40   | 10    | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Iron   | 200 U   | ug/L  | 800  | 200   | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Lead   | 3.0 U   | ug/L  | 12   | 3.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Nickel   | 10 U    | ug/L  | 40   | 10    | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Silver   | 8.0 U   | ug/L  | 32   | 8.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Sodium   | 0.80 U  | mg/L  | 3.2  | 0.80  | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Vanadium   | 2.0 U   | ug/L  | 8.0  | 2.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| Zinc   | 50 U    | ug/L  | 200  | 50    | 1  | 03/04/2022 03:00 | 03/04/2022 18:11 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |         |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U   | ug/L  | 4.0  | 1.0   | 1  | 02/24/2022 04:00 | 02/24/2022 16:05 | J   |
| Selenium   | 1.2 U   | ug/L  | 5.0  | 1.2   | 1  | 02/24/2022 04:00 | 02/24/2022 16:05 | J   |
| Thallium   | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:00 | 02/24/2022 16:05 | J   |
| <b>METALS (SW-846 7470A)</b>                       |         |       |      |       |    |                  |                  |     |
| Mercury  | 0.011 U | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:33 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U  | ug/L  | 1.0  | 0.20  | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results    | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|------------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 1,1-Dichloroethane          | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 1,1-Dichloroethylene        | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 1,2,3-Trichloropropane      | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 1,2-Dichlorobenzene         | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 1,2-Dichloroethane          | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 1,2-Dichloropropane         | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 1,4-Dichlorobenzene         | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 2-Butanone (MEK)            | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 2-Hexanone                  | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Acetone                     | <b>2.7</b> | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Acrylonitrile               | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Benzene                     | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Bromochloromethane          | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Bromodichloromethane        | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Bromoform                   | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Bromomethane                | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Carbon Disulfide            | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Carbon Tetrachloride        | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Chlorobenzene               | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Chloroethane                | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Chloroform                  | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Chloromethane               | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Dibromochloromethane        | 0.20 U     | ug/L  | 1.0 | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Dibromomethane              | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Ethylbenzene                | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333035      **Date Collected:** 02/21/2022 17:30      **Matrix:** Water  
**Sample ID:** EQUIPMENT BLANK 2      **Date Received:** 02/22/2022 10:10

| Parameter                        | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Methylene Chloride               | 1.2 U   | ug/L  | 5.0  | 1.2  | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Styrene                          | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Toluene                          | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Trichloroethene                  | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Trichlorofluoromethane           | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Vinyl Acetate                    | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Vinyl Chloride                   | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| Xylene (Total)                   | 0.75 U  | ug/L  | 3.0  | 0.75 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| cis-1,3-Dichloropropene          | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/23/2022 16:31 | 02/24/2022 09:42 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |         |       |      |      |    |                  |                  |     |
| Chloride                         | 2.0 U   | mg/L  | 8.0  | 2.0  | 1  | 02/23/2022 11:19 | 02/23/2022 11:19 | J   |
| Nitrate (as N)                   | 0.20 U  | mg/L  | 0.80 | 0.20 | 1  | 02/23/2022 11:19 | 02/23/2022 11:19 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |         |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | 0.02 U  | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 12:19 | 02/28/2022 12:19 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | 10 U    | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 104            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 109            | 86 - 123       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 106            | 80 - 121       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 50           | 101            | 77 - 125       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333036      **Date Collected:** 02/21/2022 16:39      **Matrix:** Water  
**Sample ID:** SGMW-1SR      **Date Received:** 02/22/2022 10:10

| Parameter  | Results | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |         |       |      |       |    |                  |                  |     |
| Arsenic  | 10 I    | ug/L  | 32   | 8.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Barium   | 330     | ug/L  | 12   | 3.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Beryllium  | 2.0 U   | ug/L  | 8.0  | 2.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Cadmium  | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Chromium   | 13 I    | ug/L  | 20   | 5.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Cobalt   | 1.0 U   | ug/L  | 4.0  | 1.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Copper   | 10 U    | ug/L  | 40   | 10    | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Iron   | 540 I   | ug/L  | 800  | 200   | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Lead   | 3.0 U   | ug/L  | 12   | 3.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Nickel   | 18 I    | ug/L  | 40   | 10    | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Silver   | 8.0 U   | ug/L  | 32   | 8.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Sodium   | 59      | mg/L  | 3.2  | 0.80  | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Vanadium   | 9.6     | ug/L  | 8.0  | 2.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| Zinc   | 50 U    | ug/L  | 200  | 50    | 1  | 03/04/2022 03:00 | 03/04/2022 18:15 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |         |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U   | ug/L  | 4.0  | 1.0   | 1  | 02/24/2022 04:00 | 02/24/2022 16:10 | J   |
| Selenium   | 1.2 U   | ug/L  | 5.0  | 1.2   | 1  | 02/24/2022 04:00 | 02/24/2022 16:10 | J   |
| Thallium   | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:00 | 02/24/2022 16:10 | J   |
| <b>METALS (SW-846 7470A)</b>                       |         |       |      |       |    |                  |                  |     |
| Mercury  | 0.014 I | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:37 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 10:06 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 10:06 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U  | ug/L  | 1.0  | 0.20  | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333036      **Date Collected:** 02/21/2022 16:39      **Matrix:** Water  
**Sample ID:** SGMW-1SR      **Date Received:** 02/22/2022 10:10

| Parameter                   | Results       | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 1,1-Dichloroethane          | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 1,1-Dichloroethylene        | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 1,2,3-Trichloropropane      | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 1,2-Dichlorobenzene         | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 1,2-Dichloroethane          | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 1,2-Dichloropropane         | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 1,4-Dichlorobenzene         | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 2-Butanone (MEK)            | <b>0.62 I</b> | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 2-Hexanone                  | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Acetone                     | <b>2.3</b>    | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Acrylonitrile               | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Benzene                     | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Bromochloromethane          | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Bromodichloromethane        | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Bromoform                   | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Bromomethane                | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Carbon Disulfide            | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Carbon Tetrachloride        | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Chlorobenzene               | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Chloroethane                | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Chloroform                  | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Chloromethane               | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Dibromochloromethane        | 0.20 U        | ug/L  | 1.0 | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Dibromomethane              | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Ethylbenzene                | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333036      **Date Collected:** 02/21/2022 16:39      **Matrix:** Water  
**Sample ID:** SGMW-1SR      **Date Received:** 02/22/2022 10:10

| Parameter                        | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Methylene Chloride               | 1.2 U   | ug/L  | 5.0  | 1.2  | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Styrene                          | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Toluene                          | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Trichloroethene                  | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Trichlorofluoromethane           | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Vinyl Acetate                    | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Vinyl Chloride                   | 0.25 U  | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| Xylene (Total)                   | 0.75 U  | ug/L  | 3.0  | 0.75 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| cis-1,3-Dichloropropene          | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U  | ug/L  | 1.0  | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U  | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:06 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |         |       |      |      |    |                  |                  |     |
| Chloride                         | 110     | mg/L  | 8.0  | 2.0  | 1  | 02/23/2022 15:10 | 02/23/2022 15:10 | J   |
| Nitrate (as N)                   | 1.1     | mg/L  | 0.80 | 0.20 | 1  | 02/23/2022 15:10 | 02/23/2022 15:10 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |         |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | 0.5     | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 12:20 | 02/28/2022 12:20 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | 334     | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

## Analytical Results

### Analysis Results Comments

#### Chloride

J4|Estimated Result

#### Vinyl Chloride

J4|Estimated Result

### Surrogates

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 105            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 99             | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 110            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 104            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 103            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333037      **Date Collected:** 02/21/2022 16:04      **Matrix:** Water  
**Sample ID:** SGMW-2S      **Date Received:** 02/22/2022 10:10

| Parameter  | Results        | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|----------------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |                |       |      |       |    |                  |                  |     |
| Arsenic  | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Barium   | <b>76</b>      | ug/L  | 12   | 3.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Beryllium  | 2.0 U          | ug/L  | 8.0  | 2.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Cadmium  | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Chromium   | <b>5.1 I</b>   | ug/L  | 20   | 5.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Cobalt   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Copper   | 10 U           | ug/L  | 40   | 10    | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Iron   | <b>670 I</b>   | ug/L  | 800  | 200   | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Lead   | 3.0 U          | ug/L  | 12   | 3.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Nickel   | 10 U           | ug/L  | 40   | 10    | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Silver   | 8.0 U          | ug/L  | 32   | 8.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Sodium   | <b>11</b>      | mg/L  | 3.2  | 0.80  | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Vanadium   | <b>4.4 I</b>   | ug/L  | 8.0  | 2.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| Zinc   | 50 U           | ug/L  | 200  | 50    | 1  | 03/04/2022 03:00 | 03/04/2022 18:19 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |                |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U          | ug/L  | 4.0  | 1.0   | 1  | 02/24/2022 04:00 | 02/24/2022 16:15 | J   |
| Selenium   | 1.2 U          | ug/L  | 5.0  | 1.2   | 1  | 02/24/2022 04:00 | 02/24/2022 16:15 | J   |
| Thallium   | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:00 | 02/24/2022 16:15 | J   |
| <b>METALS (SW-846 7470A)</b>                       |                |       |      |       |    |                  |                  |     |
| Mercury  | <b>0.017 I</b> | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:41 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |                |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U        | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 10:30 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U        | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 10:30 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |                |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U         | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U         | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U         | ug/L  | 1.0  | 0.20  | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333037      **Date Collected:** 02/21/2022 16:04      **Matrix:** Water  
**Sample ID:** SGMW-2S      **Date Received:** 02/22/2022 10:10

| Parameter                   | Results       | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 1,1-Dichloroethane          | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 1,1-Dichloroethylene        | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 1,2,3-Trichloropropane      | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 1,2-Dichlorobenzene         | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 1,2-Dichloroethane          | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 1,2-Dichloropropane         | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 1,4-Dichlorobenzene         | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 2-Butanone (MEK)            | <b>0.90 I</b> | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 2-Hexanone                  | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Acetone                     | <b>3.7</b>    | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Acrylonitrile               | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Benzene                     | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Bromochloromethane          | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Bromodichloromethane        | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Bromoform                   | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Bromomethane                | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Carbon Disulfide            | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Carbon Tetrachloride        | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Chlorobenzene               | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Chloroethane                | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Chloroform                  | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Chloromethane               | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Dibromochloromethane        | 0.20 U        | ug/L  | 1.0 | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Dibromomethane              | 0.50 U        | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Ethylbenzene                | 0.25 U        | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333037      **Date Collected:** 02/21/2022 16:04      **Matrix:** Water  
**Sample ID:** SGMW-2S      **Date Received:** 02/22/2022 10:10

| Parameter                        | Results       | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Methylene Chloride               | 1.2 U         | ug/L  | 5.0  | 1.2  | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Styrene                          | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Toluene                          | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Trichloroethene                  | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Trichlorofluoromethane           | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Vinyl Acetate                    | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Vinyl Chloride                   | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| Xylene (Total)                   | 0.75 U        | ug/L  | 3.0  | 0.75 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| cis-1,3-Dichloropropene          | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:30 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |               |       |      |      |    |                  |                  |     |
| Chloride                         | <b>4.3 I</b>  | mg/L  | 8.0  | 2.0  | 1  | 02/23/2022 11:42 | 02/23/2022 11:42 | J   |
| Nitrate (as N)                   | <b>0.28 I</b> | mg/L  | 0.80 | 0.20 | 1  | 02/23/2022 11:42 | 02/23/2022 11:42 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |               |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | <b>0.05</b>   | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 12:22 | 02/28/2022 12:22 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |               |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>32</b>     | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

## Analytical Results

### Analysis Results Comments

#### 1,2-Dibromo-3-Chloropropane

See Case Narration

### Surrogates

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 105            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 102            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 107            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 107            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 50           | 101            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333038      **Date Collected:** 02/21/2022 15:33      **Matrix:** Water  
**Sample ID:** MWB-11S      **Date Received:** 02/22/2022 10:10

| Parameter  | Results | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|------|-------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b>           |         |       |      |       |    |                  |                  |     |
| Arsenic  | 8.8 I   | ug/L  | 32   | 8.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Barium   | 34      | ug/L  | 12   | 3.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Beryllium  | 2.0 U   | ug/L  | 8.0  | 2.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Cadmium  | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Chromium   | 5.0 U   | ug/L  | 20   | 5.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Cobalt   | 1.0 U   | ug/L  | 4.0  | 1.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Copper   | 10 U    | ug/L  | 40   | 10    | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Iron   | 1100    | ug/L  | 800  | 200   | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Lead   | 3.0 U   | ug/L  | 12   | 3.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Nickel   | 10 U    | ug/L  | 40   | 10    | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Silver   | 8.0 U   | ug/L  | 32   | 8.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Sodium   | 13      | mg/L  | 3.2  | 0.80  | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Vanadium   | 6.1 I   | ug/L  | 8.0  | 2.0   | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| Zinc   | 50 U    | ug/L  | 200  | 50    | 1  | 03/04/2022 03:00 | 03/04/2022 18:24 | J   |
| <b>METALS (SW-846 3010A/SW-846 6020)</b>           |         |       |      |       |    |                  |                  |     |
| Antimony   | 1.0 U   | ug/L  | 4.0  | 1.0   | 1  | 02/24/2022 04:00 | 02/24/2022 16:31 | J   |
| Selenium   | 1.2 U   | ug/L  | 5.0  | 1.2   | 1  | 02/24/2022 04:00 | 02/24/2022 16:31 | J   |
| Thallium   | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:00 | 02/24/2022 16:31 | J   |
| <b>METALS (SW-846 7470A)</b>                       |         |       |      |       |    |                  |                  |     |
| Mercury  | 0.011 U | ug/L  | 0.10 | 0.011 | 1  | 03/02/2022 12:22 | 03/03/2022 15:45 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |         |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 10:54 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 10:54 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |         |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U  | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U  | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U  | ug/L  | 1.0  | 0.20  | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter                   | Results    | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|------------|-------|-----|------|----|------------------|------------------|-----|
| 1,1,2-Trichloroethane       | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 1,1-Dichloroethane          | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 1,1-Dichloroethylene        | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 1,2,3-Trichloropropane      | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 1,2-Dichlorobenzene         | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 1,2-Dichloroethane          | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 1,2-Dichloropropane         | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 1,4-Dichlorobenzene         | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 2-Butanone (MEK)            | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 2-Hexanone                  | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Acetone                     | <b>4.3</b> | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Acrylonitrile               | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Benzene                     | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Bromochloromethane          | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Bromodichloromethane        | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Bromoform                   | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Bromomethane                | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Carbon Disulfide            | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Carbon Tetrachloride        | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Chlorobenzene               | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Chloroethane                | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Chloroform                  | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Chloromethane               | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Dibromochloromethane        | 0.20 U     | ug/L  | 1.0 | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Dibromomethane              | 0.50 U     | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Ethylbenzene                | 0.25 U     | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |

Lab ID: J2202333038  
 Sample ID: MWB-11S

Date Collected: 02/21/2022 15:33  
 Date Received: 02/22/2022 10:10

Matrix: Water

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333038      **Date Collected:** 02/21/2022 15:33      **Matrix:** Water  
**Sample ID:** MWB-11S      **Date Received:** 02/22/2022 10:10

| Parameter                        | Results       | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|----------------------------------|---------------|-------|------|------|----|------------------|------------------|-----|
| Iodomethane (Methyl Iodide)      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Methylene Chloride               | 1.2 U         | ug/L  | 5.0  | 1.2  | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Styrene                          | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Tetrachloroethylene (PCE)        | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Toluene                          | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Trichloroethene                  | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Trichlorofluoromethane           | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Vinyl Acetate                    | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Vinyl Chloride                   | 0.25 U        | ug/L  | 1.0  | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| Xylene (Total)                   | 0.75 U        | ug/L  | 3.0  | 0.75 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| cis-1,2-Dichloroethylene         | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| cis-1,3-Dichloropropene          | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| trans-1,2-Dichloroethylene       | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| trans-1,3-Dichloropropylene      | 0.20 U        | ug/L  | 1.0  | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| trans-1,4-Dichloro-2-butene      | 0.50 U        | ug/L  | 2.0  | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 10:54 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b> |               |       |      |      |    |                  |                  |     |
| Chloride                         | <b>19</b>     | mg/L  | 8.0  | 2.0  | 1  | 02/23/2022 12:05 | 02/23/2022 12:05 | J   |
| Nitrate (as N)                   | <b>0.37 I</b> | mg/L  | 0.80 | 0.20 | 1  | 02/23/2022 12:05 | 02/23/2022 12:05 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b> |               |       |      |      |    |                  |                  |     |
| Ammonia (N)                      | <b>0.08</b>   | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 12:23 | 02/28/2022 12:23 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b> |               |       |      |      |    |                  |                  |     |
| Total Dissolved Solids           | <b>90</b>     | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

## Analytical Results

### Analysis Results Comments

#### Antimony

See Case Narration

### Surrogates

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Bromofluorobenzene (S)    | ug/L  | 50            | 55           | 110            | 86 - 123       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 102            | 77 - 119       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 103            | 80 - 129       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 103            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 106            | 80 - 121       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333039      **Date Collected:** 02/21/2022 00:00      **Matrix:** Water  
**Sample ID:** TRIP BLANK 3      **Date Received:** 02/22/2022 10:10

| Parameter  | Results      | Units | PQL  | MDL   | DF | Prepared         | Analyzed         | Lab |
|--|--------------|-------|------|-------|----|------------------|------------------|-----|
| <b>VOLATILES (SW-846 5030B/SW-846 8260B (SIM))</b> |              |       |      |       |    |                  |                  |     |
| 1,2-Dibromo-3-Chloropropane                        | 0.050 U      | ug/L  | 0.20 | 0.050 | 1  | 02/23/2022 16:31 | 02/24/2022 11:18 | J   |
| Ethylene Dibromide (EDB)                           | 0.019 U      | ug/L  | 0.10 | 0.019 | 1  | 02/23/2022 16:31 | 02/24/2022 11:18 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b>       |              |       |      |       |    |                  |                  |     |
| 1,1,1,2-Tetrachloroethane                          | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,1,1-Trichloroethane                              | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,1,2,2-Tetrachloroethane                          | 0.20 U       | ug/L  | 1.0  | 0.20  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,1,2-Trichloroethane                              | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,1-Dichloroethane                                 | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,1-Dichloroethylene                               | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,2,3-Trichloropropane                             | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,2-Dichlorobenzene                                | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,2-Dichloroethane                                 | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,2-Dichloropropane                                | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 1,4-Dichlorobenzene                                | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 2-Butanone (MEK)                                   | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 2-Hexanone   | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| 4-Methyl-2-pentanone (MIBK)                        | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Acetone  | <b>1.6 I</b> | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Acrylonitrile                                      | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Benzene  | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Bromochloromethane                                 | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Bromodichloromethane                               | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Bromoform  | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Bromomethane                                       | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Carbon Disulfide                                   | 0.50 U       | ug/L  | 2.0  | 0.50  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Carbon Tetrachloride                               | 0.25 U       | ug/L  | 1.0  | 0.25  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

**Lab ID:** J2202333039      **Date Collected:** 02/21/2022 00:00      **Matrix:** Water  
**Sample ID:** TRIP BLANK 3      **Date Received:** 02/22/2022 10:10

| Parameter                   | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|-----------------------------|---------|-------|-----|------|----|------------------|------------------|-----|
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | 1  | 02/24/2022 04:54 | 02/24/2022 11:18 | J   |

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FINAL

Workorder: Trail Ridge Landfill (J2202333)

## Analytical Results

| Surrogates                |       |               |              |                |                |     |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 101            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 56           | 112            | 86 - 123       | J   |
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 102            | 77 - 125       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 106            | 80 - 121       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 53           | 105            | 80 - 129       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333040 <b>Date Collected:</b> 02/21/2022 17:14 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB39I <b>Date Received:</b> 02/22/2022 10:10                         |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 200 U   | ug/L  | 800  | 200  | 1  | 03/04/2022 03:00 | 03/04/2022 18:28 | J   |
| Sodium  | 3.5     | mg/L  | 3.2  | 0.80 | 1  | 03/04/2022 03:00 | 03/04/2022 18:28 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 5.6 I   | mg/L  | 8.0  | 2.0  | 1  | 02/23/2022 12:28 | 02/23/2022 12:28 | J   |
| Nitrate (as N)  | 0.26 I  | mg/L  | 0.80 | 0.20 | 1  | 02/23/2022 12:28 | 02/23/2022 12:28 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.05    | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 12:24 | 02/28/2022 12:24 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 27      | mg/L  | 10   | 10   | 1  | 02/24/2022 10:19 | 02/24/2022 10:19 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**Analytical Results**

| Parameter   | Results | Units | PQL  | MDL  | DF | Prepared         | Analyzed         | Lab |
|---|---------|-------|------|------|----|------------------|------------------|-----|
| <b>Lab ID:</b> J2202333041 <b>Date Collected:</b> 02/21/2022 15:07 <b>Matrix:</b> Water |         |       |      |      |    |                  |                  |     |
| <b>Sample ID:</b> MWB111(R) <b>Date Received:</b> 02/22/2022 10:10                      |         |       |      |      |    |                  |                  |     |
| <b>METALS (SW-846 3010A/SW-846 6010)</b>  |         |       |      |      |    |                  |                  |     |
| Iron  | 340 I   | ug/L  | 800  | 200  | 1  | 03/04/2022 03:00 | 03/04/2022 18:41 | J   |
| Sodium  | 3.9     | mg/L  | 3.2  | 0.80 | 1  | 03/04/2022 03:00 | 03/04/2022 18:41 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>  |         |       |      |      |    |                  |                  |     |
| Chloride  | 7.0 I   | mg/L  | 8.0  | 2.0  | 1  | 02/23/2022 12:51 | 02/23/2022 12:51 | J   |
| Nitrate (as N)  | 0.31 I  | mg/L  | 0.80 | 0.20 | 1  | 02/23/2022 12:51 | 02/23/2022 12:51 | J   |
| <b>WET CHEMISTRY (EPA 350.1)</b>  |         |       |      |      |    |                  |                  |     |
| Ammonia (N)   | 0.02 U  | mg/L  | 0.04 | 0.02 | 1  | 02/28/2022 12:34 | 02/28/2022 12:34 | G   |
| <b>WET CHEMISTRY (SM 2540 C)</b>  |         |       |      |      |    |                  |                  |     |
| Total Dissolved Solids  | 23      | mg/L  | 10   | 10   | 1  | 02/25/2022 13:15 | 02/25/2022 13:15 | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** CVAJ/1424 **Analysis Method:** SW-846 7470A  
**Preparation Method:** SW-846 7470A  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333012

**Method Blank(4225234)**

| Parameter | Results | Units | PQL  | MDL   | Lab |
|-----------|---------|-------|------|-------|-----|
| Mercury   | 0.011 U | ug/L  | 0.10 | 0.011 | J   |

**Lab Control Sample (4225235)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Mercury   | ug/L  | 2             | 2            | 98             | 80 - 120       | J   |

**Matrix Spike (4225236); Matrix Spike Duplicate (4225237); Parent Lab Sample (G2201570001)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Mercury   | ug/L  | 2             | 2            | 97             | 80 - 120       | 2          | 97           | 1   | 20        | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** CVAJ/1425 **Analysis Method:** SW-846 7470A  
**Preparation Method:** SW-846 7470A  
**Associated Lab IDs:** J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021, J2202333035, J2202333036, J2202333037, J2202333038

**Method Blank(4225244)**

| Parameter | Results | Units | PQL  | MDL   | Lab |
|-----------|---------|-------|------|-------|-----|
| Mercury   | 0.011 U | ug/L  | 0.10 | 0.011 | J   |

**Lab Control Sample (4225245)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Mercury   | ug/L  | 2             | 2.1          | 104            | 80 - 120       | J   |

**Matrix Spike (4225246); Matrix Spike Duplicate (4225247); Parent Lab Sample (J2202333013)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Mercury   | ug/L  | 2             | 2.3          | 114            | 80 - 120       | 2.1        | 105          | 8   | 20        | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** ICMj/1780 **Analysis Method:** SW-846 6020  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005

**Method Blank(4214108)**

| Parameter | Results | Units | PQL | MDL  | Lab |
|-----------|---------|-------|-----|------|-----|
| Selenium  | 1.2 U   | ug/L  | 5.0 | 1.2  | J   |
| Antimony  | 1.0 U   | ug/L  | 4.0 | 1.0  | J   |
| Thallium  | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |

**Lab Control Sample (4214109)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Selenium  | ug/L  | 20            | 22           | 110            | 80 - 120       | J   |
| Antimony  | ug/L  | 20            | 21           | 103            | 80 - 120       | J   |
| Thallium  | ug/L  | 20            | 20           | 102            | 80 - 120       | J   |

**Matrix Spike (4214110); Matrix Spike Duplicate (4214111); Parent Lab Sample (J2202333001)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Selenium  | ug/L  | 20            | 18           | 92             | 75 - 125       | 18         | 90           | 3   | 20        | J   |
| Antimony  | ug/L  | 20            | 21           | 104            | 75 - 125       | 20         | 102          | 2   | 20        | J   |
| Thallium  | ug/L  | 20            | 20           | 102            | 75 - 125       | 20         | 100          | 2   | 20        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** ICMj/1782 **Analysis Method:** SW-846 6020  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021

**Method Blank(4214733)**

| Parameter | Results | Units | PQL | MDL  | Lab |
|-----------|---------|-------|-----|------|-----|
| Selenium  | 1.2 U   | ug/L  | 5.0 | 1.2  | J   |
| Antimony  | 1.0 U   | ug/L  | 4.0 | 1.0  | J   |
| Thallium  | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |

**Lab Control Sample (4214734)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Selenium  | ug/L  | 20            | 21           | 107            | 80 - 120       | J   |
| Antimony  | ug/L  | 20            | 20           | 99             | 80 - 120       | J   |
| Thallium  | ug/L  | 20            | 19           | 94             | 80 - 120       | J   |

**Matrix Spike (4214735); Matrix Spike Duplicate (4214736); Parent Lab Sample (J2202333012)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Selenium  | ug/L  | 20            | 18           | 88             | 75 - 125       | 20         | 100          | 13  | 20        | J   |
| Antimony  | ug/L  | 20            | 20           | 101            | 75 - 125       | 21         | 103          | 1   | 20        | J   |
| Thallium  | ug/L  | 20            | 19           | 95             | 75 - 125       | 20         | 100          | 5   | 20        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** ICMj/1786 **Analysis Method:** SW-846 6020  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033, J2202333035, J2202333036, J2202333037, J2202333038

**Method Blank(4217550)**

| Parameter | Results | Units | PQL | MDL  | Lab |
|-----------|---------|-------|-----|------|-----|
| Selenium  | 1.2 U   | ug/L  | 5.0 | 1.2  | J   |
| Antimony  | 1.0 U   | ug/L  | 4.0 | 1.0  | J   |
| Thallium  | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |

**Lab Control Sample (4217551)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Selenium  | ug/L  | 20            | 22           | 111            | 80 - 120       | J   |
| Antimony  | ug/L  | 20            | 22           | 111            | 80 - 120       | J   |
| Thallium  | ug/L  | 20            | 21           | 106            | 80 - 120       | J   |

**Matrix Spike (4217552); Matrix Spike Duplicate (4217553); Parent Lab Sample (J2202333028)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Selenium  | ug/L  | 20            | 21           | 107            | 75 - 125       | 20         | 102          | 5   | 20        | J   |
| Antimony  | ug/L  | 20            | 23           | 117            | 75 - 125       | 24         | 120          | 3   | 20        | J   |
| Thallium  | ug/L  | 20            | 22           | 109            | 75 - 125       | 22         | 110          | 1   | 20        | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** ICPJ/1746      **Analysis Method:** SW-846 6010  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333007, J2202333008, J2202333009, J2202333010, J2202333011

**Method Blank(4215031)**

| Parameter | Results   | Units | PQL    | MDL     | Lab |
|-----------|-----------|-------|--------|---------|-----|
| Silver    | 0.0080 U  | mg/L  | 0.032  | 0.0080  | J   |
| Arsenic   | 0.0080 U  | mg/L  | 0.032  | 0.0080  | J   |
| Barium    | 0.0030 U  | mg/L  | 0.012  | 0.0030  | J   |
| Beryllium | 0.0020 U  | mg/L  | 0.0080 | 0.0020  | J   |
| Cadmium   | 0.00050 U | mg/L  | 0.0020 | 0.00050 | J   |
| Cobalt    | 0.0010 U  | mg/L  | 0.0040 | 0.0010  | J   |
| Chromium  | 0.0050 U  | mg/L  | 0.020  | 0.0050  | J   |
| Copper    | 0.010 U   | mg/L  | 0.040  | 0.010   | J   |
| Iron      | 200 U     | ug/L  | 800    | 200     | J   |
| Sodium    | 0.80 U    | mg/L  | 3.2    | 0.80    | J   |
| Nickel    | 0.010 U   | mg/L  | 0.040  | 0.010   | J   |
| Lead      | 0.0030 U  | mg/L  | 0.012  | 0.0030  | J   |
| Vanadium  | 0.0020 U  | mg/L  | 0.0080 | 0.0020  | J   |
| Zinc      | 0.050 U   | mg/L  | 0.20   | 0.050   | J   |

**Lab Control Sample (4215032)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Silver    | mg/L  | 0.16          | .15          | 93             | 80 - 120       | J   |
| Arsenic   | mg/L  | 0.16          | .14          | 86             | 80 - 120       | J   |
| Barium    | mg/L  | 0.06          | .05          | 90             | 80 - 120       | J   |
| Beryllium | mg/L  | 0.04          | .04          | 93             | 80 - 120       | J   |
| Cadmium   | mg/L  | 0.01          | .01          | 93             | 80 - 120       | J   |
| Cobalt    | mg/L  | 0.02          | .02          | 91             | 80 - 120       | J   |
| Chromium  | mg/L  | 0.10          | .09          | 92             | 80 - 120       | J   |
| Copper    | mg/L  | 0.20          | .19          | 97             | 80 - 120       | J   |
| Iron      | ug/L  | 4000          | 3500         | 88             | 80 - 120       | J   |
| Sodium    | mg/L  | 16            | 15           | 94             | 80 - 120       | J   |
| Nickel    | mg/L  | 0.20          | .18          | 90             | 80 - 120       | J   |
| Lead      | mg/L  | 0.06          | .06          | 91             | 80 - 120       | J   |
| Vanadium  | mg/L  | 0.04          | .04          | 94             | 80 - 120       | J   |
| Zinc      | mg/L  | 1             | .91          | 91             | 80 - 120       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** ICPJ/1746 **Analysis Method:** SW-846 6010  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333007, J2202333008, J2202333009, J2202333010, J2202333011

**Matrix Spike (4215033); Matrix Spike Duplicate (4215034); Parent Lab Sample (J2202343001)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Silver    | mg/L  | 0.16          | .15          | 93             | 75 - 125       | .15        | 92           | 1   | 20        | J   |
| Arsenic   | mg/L  | 0.16          | .13          | 76             | 75 - 125       | .14        | 79           | 3   | 20        | J   |
| Barium    | mg/L  | 0.06          | .08          | 92             | 75 - 125       | .08        | 92           | 0   | 20        | J   |
| Beryllium | mg/L  | 0.04          | .04          | 91             | 75 - 125       | .04        | 92           | 1   | 20        | J   |
| Cadmium   | mg/L  | 0.01          | .01          | 92             | 75 - 125       | .01        | 91           | 1   | 20        | J   |
| Cobalt    | mg/L  | 0.02          | .02          | 88             | 75 - 125       | .02        | 89           | 1   | 20        | J   |
| Chromium  | mg/L  | 0.10          | .09          | 88             | 75 - 125       | .09        | 89           | 1   | 20        | J   |
| Copper    | mg/L  | 0.20          | .21          | 96             | 75 - 125       | .21        | 96           | 0   | 20        | J   |
| Iron      | ug/L  | 4000          | 3500         | 88             | 75 - 125       | 3600       | 90           | 3   | 20        | J   |
| Sodium    | mg/L  | 16            | 21           | 88             | 75 - 125       | 21         | 88           | 0   | 20        | J   |
| Nickel    | mg/L  | 0.20          | .18          | 89             | 75 - 125       | .18        | 89           | 0   | 20        | J   |
| Lead      | mg/L  | 0.06          | .06          | 93             | 75 - 125       | .06        | 94           | 1   | 20        | J   |
| Vanadium  | mg/L  | 0.04          | .04          | 95             | 75 - 125       | .04        | 97           | 2   | 20        | J   |
| Zinc      | mg/L  | 1             | .95          | 88             | 75 - 125       | .96        | 89           | 0   | 20        | J   |

**Method Blank(4215031)**

| Parameter | Results   | Units | PQL    | MDL     | Lab |
|-----------|-----------|-------|--------|---------|-----|
| Silver    | 0.0080 U  | mg/L  | 0.032  | 0.0080  | J   |
| Arsenic   | 0.0080 U  | mg/L  | 0.032  | 0.0080  | J   |
| Barium    | 0.0030 U  | mg/L  | 0.012  | 0.0030  | J   |
| Beryllium | 0.0020 U  | mg/L  | 0.0080 | 0.0020  | J   |
| Cadmium   | 0.00050 U | mg/L  | 0.0020 | 0.00050 | J   |
| Cobalt    | 0.0010 U  | mg/L  | 0.0040 | 0.0010  | J   |
| Chromium  | 0.0050 U  | mg/L  | 0.020  | 0.0050  | J   |
| Copper    | 0.010 U   | mg/L  | 0.040  | 0.010   | J   |
| Iron      | 200 U     | ug/L  | 800    | 200     | J   |
| Sodium    | 0.80 U    | mg/L  | 3.2    | 0.80    | J   |
| Nickel    | 0.010 U   | mg/L  | 0.040  | 0.010   | J   |
| Lead      | 0.0030 U  | mg/L  | 0.012  | 0.0030  | J   |
| Vanadium  | 0.0020 U  | mg/L  | 0.0080 | 0.0020  | J   |
| Zinc      | 0.050 U   | mg/L  | 0.20   | 0.050   | J   |

**Lab Control Sample (4215032)**





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** ICPJ/1746 **Analysis Method:** SW-846 6010  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333007, J2202333008, J2202333009, J2202333010, J2202333011

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Silver    | mg/L  | 0.16          | .15          | 93             | 80 - 120       | J   |
| Arsenic   | mg/L  | 0.16          | .14          | 86             | 80 - 120       | J   |
| Barium    | mg/L  | 0.06          | .05          | 90             | 80 - 120       | J   |
| Beryllium | mg/L  | 0.04          | .04          | 93             | 80 - 120       | J   |
| Cadmium   | mg/L  | 0.01          | .01          | 93             | 80 - 120       | J   |
| Cobalt    | mg/L  | 0.02          | .02          | 91             | 80 - 120       | J   |
| Chromium  | mg/L  | 0.10          | .09          | 92             | 80 - 120       | J   |
| Copper    | mg/L  | 0.20          | .19          | 97             | 80 - 120       | J   |
| Iron      | ug/L  | 4000          | 3500         | 88             | 80 - 120       | J   |
| Sodium    | mg/L  | 16            | 15           | 94             | 80 - 120       | J   |
| Nickel    | mg/L  | 0.20          | .18          | 90             | 80 - 120       | J   |
| Lead      | mg/L  | 0.06          | .06          | 91             | 80 - 120       | J   |
| Vanadium  | mg/L  | 0.04          | .04          | 94             | 80 - 120       | J   |
| Zinc      | mg/L  | 1             | .91          | 91             | 80 - 120       | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** ICPj/1750 **Analysis Method:** SW-846 6010  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020

**Method Blank(4218272)**

| Parameter | Results | Units | PQL | MDL  | Lab |
|-----------|---------|-------|-----|------|-----|
| Silver    | 8.0 U   | ug/L  | 32  | 8.0  | J   |
| Arsenic   | 8.0 U   | ug/L  | 32  | 8.0  | J   |
| Barium    | 3.0 U   | ug/L  | 12  | 3.0  | J   |
| Beryllium | 2.0 U   | ug/L  | 8.0 | 2.0  | J   |
| Cadmium   | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Cobalt    | 1.0 U   | ug/L  | 4.0 | 1.0  | J   |
| Chromium  | 5.0 U   | ug/L  | 20  | 5.0  | J   |
| Copper    | 10 U    | ug/L  | 40  | 10   | J   |
| Iron      | 200 U   | ug/L  | 800 | 200  | J   |
| Sodium    | 0.80 U  | mg/L  | 3.2 | 0.80 | J   |
| Nickel    | 10 U    | ug/L  | 40  | 10   | J   |
| Lead      | 3.0 U   | ug/L  | 12  | 3.0  | J   |
| Vanadium  | 2.0 U   | ug/L  | 8.0 | 2.0  | J   |
| Zinc      | 50 U    | ug/L  | 200 | 50   | J   |

**Lab Control Sample (4218273)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Silver    | ug/L  | 160           | 150          | 93             | 80 - 120       | J   |
| Arsenic   | ug/L  | 160           | 160          | 102            | 80 - 120       | J   |
| Barium    | ug/L  | 60            | 55           | 92             | 80 - 120       | J   |
| Beryllium | ug/L  | 40            | 36           | 89             | 80 - 120       | J   |
| Cadmium   | ug/L  | 10            | 9            | 90             | 80 - 120       | J   |
| Cobalt    | ug/L  | 20            | 17           | 87             | 80 - 120       | J   |
| Chromium  | ug/L  | 100           | 87           | 87             | 80 - 120       | J   |
| Copper    | ug/L  | 200           | 180          | 91             | 80 - 120       | J   |
| Iron      | ug/L  | 4000          | 3500         | 86             | 80 - 120       | J   |
| Sodium    | mg/L  | 16            | 16           | 102            | 80 - 120       | J   |
| Nickel    | ug/L  | 200           | 180          | 91             | 80 - 120       | J   |
| Lead      | ug/L  | 60            | 58           | 97             | 80 - 120       | J   |
| Vanadium  | ug/L  | 40            | 34           | 85             | 80 - 120       | J   |
| Zinc      | ug/L  | 1000          | 930          | 93             | 80 - 120       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** ICPJ/1750 **Analysis Method:** SW-846 6010  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020

**Matrix Spike (4218274); Matrix Spike Duplicate (4218275); Parent Lab Sample (G2201476001)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Silver    | ug/L  | 160           | 150          | 94             | 75 - 125       | 150        | 93           | 1   | 20        | J   |
| Arsenic   | ug/L  | 160           | 170          | 93             | 75 - 125       | 180        | 98           | 4   | 20        | J   |
| Barium    | ug/L  | 60            | 55           | 92             | 75 - 125       | 55         | 91           | 1   | 20        | J   |
| Beryllium | ug/L  | 40            | 35           | 88             | 75 - 125       | 35         | 87           | 0   | 20        | J   |
| Cadmium   | ug/L  | 10            | 9.2          | 92             | 75 - 125       | 9.4        | 94           | 2   | 20        | J   |
| Cobalt    | ug/L  | 20            | 17           | 87             | 75 - 125       | 17         | 84           | 4   | 20        | J   |
| Chromium  | ug/L  | 100           | 100          | 89             | 75 - 125       | 100        | 89           | 0   | 20        | J   |
| Copper    | ug/L  | 200           | 200          | 92             | 75 - 125       | 200        | 90           | 1   | 20        | J   |
| Iron      | ug/L  | 4000          | 3700         | 82             | 75 - 125       | 3600       | 81           | 1   | 20        | J   |
| Sodium    | mg/L  | 16            | 19           | 89             | 75 - 125       | 19         | 87           | 2   | 20        | J   |
| Nickel    | ug/L  | 200           | 190          | 86             | 75 - 125       | 190        | 86           | 0   | 20        | J   |
| Lead      | ug/L  | 60            | 60           | 99             | 75 - 125       | 57         | 95           | 4   | 20        | J   |
| Vanadium  | ug/L  | 40            | 37           | 84             | 75 - 125       | 38         | 86           | 2   | 20        | J   |
| Zinc      | ug/L  | 1000          | 940          | 89             | 75 - 125       | 930        | 88           | 1   | 20        | J   |

**Method Blank(4218272)**

| Parameter | Results | Units | PQL | MDL  | Lab |
|-----------|---------|-------|-----|------|-----|
| Silver    | 8.0 U   | ug/L  | 32  | 8.0  | J   |
| Arsenic   | 8.0 U   | ug/L  | 32  | 8.0  | J   |
| Barium    | 3.0 U   | ug/L  | 12  | 3.0  | J   |
| Beryllium | 2.0 U   | ug/L  | 8.0 | 2.0  | J   |
| Cadmium   | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Cobalt    | 1.0 U   | ug/L  | 4.0 | 1.0  | J   |
| Chromium  | 5.0 U   | ug/L  | 20  | 5.0  | J   |
| Copper    | 10 U    | ug/L  | 40  | 10   | J   |
| Iron      | 200 U   | ug/L  | 800 | 200  | J   |
| Sodium    | 0.80 U  | mg/L  | 3.2 | 0.80 | J   |
| Nickel    | 10 U    | ug/L  | 40  | 10   | J   |
| Lead      | 3.0 U   | ug/L  | 12  | 3.0  | J   |
| Vanadium  | 2.0 U   | ug/L  | 8.0 | 2.0  | J   |
| Zinc      | 50 U    | ug/L  | 200 | 50   | J   |







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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** ICPJ/1758 **Analysis Method:** SW-846 6010  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333021, J2202333023, J2202333024, J2202333025, J2202333026, J2202333027, J2202333028, J2202333029, J2202333030

**Method Blank(4224253)**

| Parameter | Results | Units | PQL  | MDL  | Lab |
|-----------|---------|-------|------|------|-----|
| Silver    | 8.0 U   | ug/L  | 32   | 8.0  | J   |
| Arsenic   | 8.0 U   | ug/L  | 32   | 8.0  | J   |
| Barium    | 3.0 U   | ug/L  | 12   | 3.0  | J   |
| Beryllium | 2.0 U   | ug/L  | 8.0  | 2.0  | J   |
| Calcium   | 0.20 U  | mg/L  | 0.80 | 0.20 | J   |
| Cadmium   | 0.50 U  | ug/L  | 2.0  | 0.50 | J   |
| Cobalt    | 1.0 U   | ug/L  | 4.0  | 1.0  | J   |
| Chromium  | 5.0 U   | ug/L  | 20   | 5.0  | J   |
| Copper    | 10 U    | ug/L  | 40   | 10   | J   |
| Iron      | 200 U   | ug/L  | 800  | 200  | J   |
| Magnesium | 0.10 U  | mg/L  | 0.40 | 0.10 | J   |
| Sodium    | 0.80 U  | mg/L  | 3.2  | 0.80 | J   |
| Lead      | 3.0 U   | ug/L  | 12   | 3.0  | J   |
| Vanadium  | 2.0 U   | ug/L  | 8.0  | 2.0  | J   |
| Zinc      | 50 U    | ug/L  | 200  | 50   | J   |

**Lab Control Sample (4224254)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Silver    | ug/L  | 160           | 150          | 96             | 80 - 120       | J   |
| Arsenic   | ug/L  | 160           | 150          | 93             | 80 - 120       | J   |
| Barium    | ug/L  | 60            | 58           | 96             | 80 - 120       | J   |
| Beryllium | ug/L  | 40            | 37           | 94             | 80 - 120       | J   |
| Calcium   | mg/L  | 4             | 3.8          | 95             | 80 - 120       | J   |
| Cadmium   | ug/L  | 10            | 9.5          | 95             | 80 - 120       | J   |
| Cobalt    | ug/L  | 20            | 19           | 95             | 80 - 120       | J   |
| Chromium  | ug/L  | 100           | 93           | 93             | 80 - 120       | J   |
| Copper    | ug/L  | 200           | 200          | 98             | 80 - 120       | J   |
| Iron      | ug/L  | 4000          | 3800         | 94             | 80 - 120       | J   |
| Magnesium | mg/L  | 2             | 1.9          | 96             | 80 - 120       | J   |
| Sodium    | mg/L  | 16            | 15           | 92             | 80 - 120       | J   |
| Nickel    | ug/L  | 200           | 200          | 101            | 80 - 120       | J   |
| Lead      | ug/L  | 60            | 59           | 98             | 80 - 120       | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** ICP/1758 **Analysis Method:** SW-846 6010  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333021, J2202333023, J2202333024, J2202333025, J2202333026, J2202333027, J2202333028, J2202333029, J2202333030

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Vanadium  | ug/L  | 40            | 37           | 92             | 80 - 120       | J   |
| Zinc      | ug/L  | 1000          | 960          | 96             | 80 - 120       | J   |

**Matrix Spike (4224255); Matrix Spike Duplicate (4224256); Parent Lab Sample (J2202647001)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Silver         | ug/L  | 160           | 160          | 98             | 75 - 125       | 150        | 95           | 3   | 20        | J   |
| Arsenic        | ug/L  | 160           | 160          | 99             | 75 - 125       | 160        | 101          | 1   | 20        | J   |
| Barium         | ug/L  | 60            | 160          | 104            | 75 - 125       | 160        | 99           | 2   | 20        | J   |
| Beryllium      | ug/L  | 40            | 39           | 98             | 75 - 125       | 39         | 97           | 1   | 20        | J   |
| <b>Calcium</b> | mg/L  | 4             | 63           | <b>179</b>     | 75 - 125       | 61         | <b>128</b>   | 3   | 20        | J   |
| Cadmium        | ug/L  | 10            | 9.4          | 94             | 75 - 125       | 9.2        | 92           | 2   | 20        | J   |
| Cobalt         | ug/L  | 20            | 20           | 101            | 75 - 125       | 19         | 97           | 4   | 20        | J   |
| Chromium       | ug/L  | 100           | 98           | 98             | 75 - 125       | 98         | 98           | 0   | 20        | J   |
| Copper         | ug/L  | 200           | 200          | 100            | 75 - 125       | 200        | 99           | 2   | 20        | J   |
| Iron           | ug/L  | 4000          | 8500         | 101            | 75 - 125       | 8300       | 96           | 2   | 20        | J   |
| Magnesium      | mg/L  | 2             | 4.2          | 102            | 75 - 125       | 4.1        | 95           | 4   | 20        | J   |
| <b>Sodium</b>  | mg/L  | 16            | 270          | <b>191</b>     | 75 - 125       | 260        | <b>140</b>   | 3   | 20        | J   |
| Nickel         | ug/L  | 200           | 190          | 95             | 75 - 125       | 190        | 94           | 1   | 20        | J   |
| Lead           | ug/L  | 60            | 66           | 97             | 75 - 125       | 64         | 93           | 4   | 20        | J   |
| Vanadium       | ug/L  | 40            | 41           | 102            | 75 - 125       | 39         | 99           | 3   | 20        | J   |
| Zinc           | ug/L  | 1000          | 1000         | 101            | 75 - 125       | 1000       | 100          | 1   | 20        | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** ICPJ/1761 **Analysis Method:** SW-846 6010  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333031, J2202333032, J2202333033, J2202333035, J2202333036, J2202333037, J2202333038, J2202333040, J2202333041

**Method Blank(4225300)**

| Parameter | Results | Units | PQL  | MDL  | Lab |
|-----------|---------|-------|------|------|-----|
| Silver    | 8.0 U   | ug/L  | 32   | 8.0  | J   |
| Arsenic   | 8.0 U   | ug/L  | 32   | 8.0  | J   |
| Barium    | 3.0 U   | ug/L  | 12   | 3.0  | J   |
| Beryllium | 2.0 U   | ug/L  | 8.0  | 2.0  | J   |
| Calcium   | 0.20 U  | mg/L  | 0.80 | 0.20 | J   |
| Cadmium   | 0.50 U  | ug/L  | 2.0  | 0.50 | J   |
| Cobalt    | 1.0 U   | ug/L  | 4.0  | 1.0  | J   |
| Chromium  | 5.0 U   | ug/L  | 20   | 5.0  | J   |
| Copper    | 10 U    | ug/L  | 40   | 10   | J   |
| Iron      | 200 U   | ug/L  | 800  | 200  | J   |
| Magnesium | 0.10 U  | mg/L  | 0.40 | 0.10 | J   |
| Sodium    | 0.80 U  | mg/L  | 3.2  | 0.80 | J   |
| Nickel    | 10 U    | ug/L  | 40   | 10   | J   |
| Lead      | 3.0 U   | ug/L  | 12   | 3.0  | J   |
| Vanadium  | 2.0 U   | ug/L  | 8.0  | 2.0  | J   |
| Zinc      | 50 U    | ug/L  | 200  | 50   | J   |

**Lab Control Sample (4225301)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Silver    | ug/L  | 160           | 160          | 98             | 80 - 120       | J   |
| Arsenic   | ug/L  | 160           | 150          | 97             | 80 - 120       | J   |
| Barium    | ug/L  | 60            | 58           | 97             | 80 - 120       | J   |
| Beryllium | ug/L  | 40            | 40           | 100            | 80 - 120       | J   |
| Calcium   | mg/L  | 4             | 4            | 99             | 80 - 120       | J   |
| Cadmium   | ug/L  | 10            | 9.7          | 97             | 80 - 120       | J   |
| Cobalt    | ug/L  | 20            | 20           | 98             | 80 - 120       | J   |
| Chromium  | ug/L  | 100           | 97           | 97             | 80 - 120       | J   |
| Copper    | ug/L  | 200           | 200          | 98             | 80 - 120       | J   |
| Iron      | ug/L  | 4000          | 3900         | 97             | 80 - 120       | J   |
| Magnesium | mg/L  | 2             | 2            | 99             | 80 - 120       | J   |
| Sodium    | mg/L  | 16            | 16           | 99             | 80 - 120       | J   |
| Nickel    | ug/L  | 200           | 190          | 97             | 80 - 120       | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** ICPJ/1761 **Analysis Method:** SW-846 6010  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2202333031, J2202333032, J2202333033, J2202333035, J2202333036, J2202333037, J2202333038, J2202333040, J2202333041

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Lead      | ug/L  | 60            | 58           | 97             | 80 - 120       | J   |
| Vanadium  | ug/L  | 40            | 39           | 98             | 80 - 120       | J   |
| Zinc      | ug/L  | 1000          | 990          | 99             | 80 - 120       | J   |

**Matrix Spike (4225302); Matrix Spike Duplicate (4225303); Parent Lab Sample (J2202333031)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Silver         | ug/L  | 160           | 160          | 99             | 75 - 125       | 160        | 99           | 1   | 20        | J   |
| Arsenic        | ug/L  | 160           | 160          | 98             | 75 - 125       | 160        | 102          | 4   | 20        | J   |
| Barium         | ug/L  | 60            | 76           | 101            | 75 - 125       | 76         | 101          | 0   | 20        | J   |
| Beryllium      | ug/L  | 40            | 40           | 101            | 75 - 125       | 40         | 101          | 0   | 20        | J   |
| <b>Calcium</b> | mg/L  | 4             | 37           | <b>139</b>     | 75 - 125       | 38         | <b>171</b>   | 3   | 20        | J   |
| Cadmium        | ug/L  | 10            | 9.8          | 98             | 75 - 125       | 9.8        | 98           | 0   | 20        | J   |
| Cobalt         | ug/L  | 20            | 20           | 98             | 75 - 125       | 20         | 98           | 1   | 20        | J   |
| Chromium       | ug/L  | 100           | 97           | 97             | 75 - 125       | 100        | 101          | 4   | 20        | J   |
| Copper         | ug/L  | 200           | 200          | 98             | 75 - 125       | 200        | 98           | 0   | 20        | J   |
| Iron           | ug/L  | 4000          | 4200         | 97             | 75 - 125       | 4300       | 100          | 2   | 20        | J   |
| Magnesium      | mg/L  | 2             | 3.8          | 104            | 75 - 125       | 3.9        | 108          | 2   | 20        | J   |
| Sodium         | mg/L  | 16            | 20           | 99             | 75 - 125       | 20         | 101          | 1   | 20        | J   |
| Nickel         | ug/L  | 200           | 200          | 98             | 75 - 125       | 190        | 97           | 1   | 20        | J   |
| Lead           | ug/L  | 60            | 62           | 103            | 75 - 125       | 60         | 100          | 3   | 20        | J   |
| Vanadium       | ug/L  | 40            | 40           | 100            | 75 - 125       | 41         | 102          | 2   | 20        | J   |
| Zinc           | ug/L  | 1000          | 1000         | 101            | 75 - 125       | 1000       | 100          | 1   | 20        | J   |





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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** MICj/2607 **Analysis Method:** COLILERT-18 (Fecal Coliforms)  
**Preparation Method:** COLILERT-18 (Fecal Coliforms)  
**Associated Lab IDs:** J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033

**Method Blank(4220573)**

| Parameter      | Results | Units      | PQL | MDL | Lab |
|----------------|---------|------------|-----|-----|-----|
| Coliform Fecal | 1 U     | MPN/100 mL | 1   | 1   | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** MSVJ/3401 **Analysis Method:** SW-846 8260B (SIM)  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333006

**Method Blank(4214898)**

| Parameter                   | Results | Units | PQL  | MDL   | Lab |
|-----------------------------|---------|-------|------|-------|-----|
| Ethylene Dibromide (EDB)    | 0.019 U | ug/L  | 0.10 | 0.019 | J   |
| 1,2-Dibromo-3-Chloropropane | 0.050 U | ug/L  | 0.20 | 0.050 | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 103            | 77 - 125       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 50           | 99             | 80 - 129       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 105            | 80 - 121       |     |

**Lab Control Sample (4214899); Lab Control Sample Duplicate (4214900)**

| Parameter                | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|--------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Ethylene Dibromide (EDB) | ug/L  | 0.80          | .78          | 98             | 70 - 130       | .71        | 89           | 9   | 30        | J   |
| 1,2-Dibromo-3-Chloropro  | ug/L  | 0.80          | 1.1          | 141            | 70 - 130       | .98        | 123          | 14  | 30        | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 105            | 77 - 125       | 51         | 103          | 3   |           |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 101            | 80 - 129       | 50         | 101          | 0   |           |     |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 105            | 80 - 121       | 53         | 106          | 2   |           |     |

**Matrix Spike (4214901); Parent Lab Sample (J2202333001)**

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Ethylene Dibromide (EDB)    | ug/L  | 0.80          | .65          | 81             | 70 - 130       | J   |
| 1,2-Dibromo-3-Chloropropane | ug/L  | 0.80          | .89          | 111            | 70 - 130       | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 104            | 77 - 125       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 50           | 100            | 80 - 129       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 54           | 109            | 80 - 121       |     |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** MSVJ/3410 **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333006

**Method Blank(4214945)**

| Parameter                   | Results | Units | PQL | MDL  | Lab |
|-----------------------------|---------|-------|-----|------|-----|
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 1,1,1-Trichloroethane       | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVJ/3410 **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333006

| Parameter                   | Results | Units | PQL | MDL  | Lab |
|-----------------------------|---------|-------|-----|------|-----|
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 1,1,1,2-Tetrachloroethane   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,1,1,2-Tetrachloroethane   | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 107            | 70 - 128       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 53           | 105            | 86 - 123       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 101            | 77 - 119       |     |

**Lab Control Sample (4214946); Lab Control Sample Duplicate (4214947)**

| Parameter                  | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chloromethane              | ug/L  | 20            | 14           | 72             |                | 13         | 63           | 14  |           | J   |
| Vinyl Chloride             | ug/L  | 20            | 17           | 83             | 70 - 130       | 15         | 73           | 13  | 20        | J   |
| Bromomethane               | ug/L  | 20            | 5.8          | 29             |                | 5          | 25           | 16  |           | J   |
| Chloroethane               | ug/L  | 20            | 20           | 100            |                | 18         | 92           | 9   |           | J   |
| Trichlorofluoromethane     | ug/L  | 20            | 20           | 99             |                | 18         | 90           | 9   |           | J   |
| Acetone                    | ug/L  | 20            | 23           | 115            |                | 22         | 111          | 4   |           | J   |
| 1,1-Dichloroethylene       | ug/L  | 20            | 21           | 103            | 70 - 130       | 19         | 93           | 10  | 20        | J   |
| Iodomethane (Methyl Iodid  | ug/L  | 20            | 8.7          | 44             |                | 5.4        | 27           | 48  |           | J   |
| Acrylonitrile              | ug/L  | 20            | 19           | 97             |                | 19         | 96           | 1   |           | J   |
| Methylene Chloride         | ug/L  | 20            | 20           | 101            |                | 19         | 93           | 8   |           | J   |
| Carbon Disulfide           | ug/L  | 20            | 20           | 101            |                | 18         | 91           | 10  |           | J   |
| trans-1,2-Dichloroethylene | ug/L  | 20            | 20           | 103            |                | 19         | 93           | 9   |           | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVj/3410 **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333006

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| 1,1-Dichloroethane          | ug/L  | 20            | 21           | 103            |                | 19         | 94           | 9   |           | J   |
| Vinyl Acetate               | ug/L  | 20            | 23           | 115            |                | 20         | 102          | 12  |           | J   |
| 2-Butanone (MEK)            | ug/L  | 20            | 23           | 115            |                | 22         | 108          | 6   |           | J   |
| cis-1,2-Dichloroethylene    | ug/L  | 20            | 21           | 104            | 70 - 130       | 19         | 95           | 9   | 20        | J   |
| Bromochloromethane          | ug/L  | 20            | 23           | 116            |                | 21         | 106          | 9   |           | J   |
| Chloroform                  | ug/L  | 20            | 20           | 102            | 70 - 130       | 19         | 95           | 7   | 20        | J   |
| 1,2-Dichloroethane          | ug/L  | 20            | 20           | 102            |                | 19         | 95           | 6   |           | J   |
| 1,1,1-Trichloroethane       | ug/L  | 20            | 20           | 101            |                | 18         | 91           | 11  |           | J   |
| Carbon Tetrachloride        | ug/L  | 20            | 21           | 103            |                | 19         | 94           | 8   |           | J   |
| Benzene                     | ug/L  | 20            | 20           | 101            | 70 - 130       | 19         | 94           | 8   | 20        | J   |
| Dibromomethane              | ug/L  | 20            | 21           | 103            |                | 20         | 98           | 5   |           | J   |
| 1,2-Dichloropropane         | ug/L  | 20            | 21           | 104            |                | 19         | 94           | 10  |           | J   |
| Trichloroethene             | ug/L  | 20            | 19           | 97             | 70 - 130       | 18         | 91           | 6   | 20        | J   |
| Bromodichloromethane        | ug/L  | 20            | 20           | 100            |                | 18         | 92           | 8   |           | J   |
| cis-1,3-Dichloropropene     | ug/L  | 20            | 19           | 93             |                | 17         | 84           | 11  |           | J   |
| 4-Methyl-2-pentanone (MIB)  | ug/L  | 20            | 21           | 104            |                | 20         | 98           | 6   |           | J   |
| trans-1,3-Dichloropropylene | ug/L  | 20            | 18           | 88             |                | 16         | 80           | 10  |           | J   |
| 1,1,2-Trichloroethane       | ug/L  | 20            | 20           | 102            |                | 19         | 95           | 7   |           | J   |
| Toluene                     | ug/L  | 20            | 20           | 103            | 70 - 130       | 19         | 96           | 6   | 20        | J   |
| 2-Hexanone                  | ug/L  | 20            | 21           | 103            |                | 20         | 99           | 3   |           | J   |
| Dibromochloromethane        | ug/L  | 20            | 20           | 98             |                | 18         | 91           | 8   |           | J   |
| Tetrachloroethylene (PCE)   | ug/L  | 20            | 20           | 100            | 70 - 130       | 18         | 91           | 9   | 20        | J   |
| 1,1,1,2-Tetrachloroethane   | ug/L  | 20            | 20           | 100            |                | 18         | 91           | 10  |           | J   |
| Chlorobenzene               | ug/L  | 20            | 20           | 100            | 70 - 130       | 19         | 94           | 7   | 20        | J   |
| Ethylbenzene                | ug/L  | 20            | 21           | 106            | 70 - 130       | 19         | 97           | 8   | 20        | J   |
| Bromoform                   | ug/L  | 20            | 19           | 93             |                | 18         | 88           | 6   |           | J   |
| Styrene                     | ug/L  | 20            | 20           | 98             |                | 18         | 89           | 9   |           | J   |
| 1,1,2,2-Tetrachloroethane   | ug/L  | 20            | 21           | 107            |                | 20         | 102          | 4   |           | J   |
| 1,2,3-Trichloropropane      | ug/L  | 20            | 19           | 94             |                | 18         | 88           | 7   |           | J   |
| 1,4-Dichlorobenzene         | ug/L  | 20            | 21           | 105            |                | 19         | 94           | 10  |           | J   |
| 1,2-Dichlorobenzene         | ug/L  | 20            | 21           | 106            | 70 - 130       | 19         | 97           | 9   | 20        | J   |
| Xylene (Total)              | ug/L  | 60            | 62           | 103            | 70 - 130       | 58         | 96           | 7   | 20        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVj/3410 **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333006

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 4-Methyl-2-pentanone (MIBK) | ug/L  | 20            | 20           | 102            |                | J   |
| trans-1,3-Dichloropropylene | ug/L  | 20            | 17           | 84             |                | J   |
| 1,1,2-Trichloroethane       | ug/L  | 20            | 19           | 94             |                | J   |
| Toluene                     | ug/L  | 20            | 19           | 97             | 70 - 130       | J   |
| 2-Hexanone                  | ug/L  | 20            | 21           | 104            |                | J   |
| Dibromochloromethane        | ug/L  | 20            | 19           | 95             |                | J   |
| Tetrachloroethylene (PCE)   | ug/L  | 20            | 19           | 93             | 70 - 130       | J   |
| 1,1,1,2-Tetrachloroethane   | ug/L  | 20            | 19           | 97             |                | J   |
| Chlorobenzene               | ug/L  | 20            | 20           | 98             | 70 - 130       | J   |
| Ethylbenzene                | ug/L  | 20            | 20           | 100            | 70 - 130       | J   |
| Bromoform                   | ug/L  | 20            | 18           | 90             |                | J   |
| Styrene                     | ug/L  | 20            | 19           | 95             |                | J   |
| 1,1,1,2-Tetrachloroethane   | ug/L  | 20            | 21           | 103            |                | J   |
| 1,2,3-Trichloropropane      | ug/L  | 20            | 20           | 98             |                | J   |
| 1,4-Dichlorobenzene         | ug/L  | 20            | 21           | 104            |                | J   |
| 1,2-Dichlorobenzene         | ug/L  | 20            | 21           | 106            | 70 - 130       | J   |
| Xylene (Total)              | ug/L  | 60            | 59           | 98             | 70 - 130       | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 51           | 101            | 70 - 128       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 104            | 86 - 123       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 49           | 98             | 77 - 119       |     |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** MSVJ/3427 **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021, J2202333022, J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033, J2202333034, J2202333035

**Method Blank(4217161)**

| Parameter                   | Results | Units | PQL | MDL  | Lab |
|-----------------------------|---------|-------|-----|------|-----|
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 1,1,1-Trichloroethane       | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

QC Batch: MSVJ/3427 Analysis Method: SW-846 8260B  
Preparation Method: SW-846 5030B  
Associated Lab IDs: J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021, J2202333022, J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033, J2202333034, J2202333035

| Parameter                   | Results | Units | PQL | MDL  | Lab |
|-----------------------------|---------|-------|-----|------|-----|
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 1,1,1,2-Tetrachloroethane   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,1,1,2-Tetrachloroethane   | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | J   |

Surrogates

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 107            | 70 - 128       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 54           | 109            | 86 - 123       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 101            | 77 - 119       |     |

Lab Control Sample (4217162); Lab Control Sample Duplicate (4217163)

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chloromethane             | ug/L  | 20            | 15           | 77             |                | 14         | 68           | 13  |           | J   |
| Vinyl Chloride            | ug/L  | 20            | 18           | 91             | 70 - 130       | 16         | 79           | 15  | 20        | J   |
| Bromomethane              | ug/L  | 20            | 7.1          | 36             |                | 7.5        | 37           | 5   |           | J   |
| Chloroethane              | ug/L  | 20            | 19           | 95             |                | 18         | 89           | 7   |           | J   |
| Trichlorofluoromethane    | ug/L  | 20            | 18           | 91             |                | 17         | 86           | 6   |           | J   |
| Acetone                   | ug/L  | 20            | 20           | 102            |                | 22         | 112          | 10  |           | J   |
| 1,1-Dichloroethylene      | ug/L  | 20            | 19           | 97             | 70 - 130       | 19         | 94           | 3   | 20        | J   |
| Iodomethane (Methyl Iodid | ug/L  | 20            | 8.1          | 40             |                | 6.6        | 33           | 20  |           | J   |
| Acrylonitrile             | ug/L  | 20            | 18           | 88             |                | 19         | 93           | 6   |           | J   |
| Methylene Chloride        | ug/L  | 20            | 19           | 93             |                | 19         | 94           | 1   |           | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVJ/3427 **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021, J2202333022, J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033, J2202333034, J2202333035

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Carbon Disulfide            | ug/L  | 20            | 19           | 96             |                | 18         | 88           | 8   |           | J   |
| trans-1,2-Dichloroethylene  | ug/L  | 20            | 19           | 96             |                | 20         | 98           | 3   |           | J   |
| 1,1-Dichloroethane          | ug/L  | 20            | 19           | 94             |                | 20         | 98           | 4   |           | J   |
| Vinyl Acetate               | ug/L  | 20            | 20           | 100            |                | 8          | 40           | 85  |           | J   |
| 2-Butanone (MEK)            | ug/L  | 20            | 20           | 99             |                | 21         | 104          | 5   |           | J   |
| cis-1,2-Dichloroethylene    | ug/L  | 20            | 19           | 93             | 70 - 130       | 19         | 95           | 2   | 20        | J   |
| Bromochloromethane          | ug/L  | 20            | 21           | 107            |                | 22         | 109          | 2   |           | J   |
| Chloroform                  | ug/L  | 20            | 19           | 95             | 70 - 130       | 20         | 98           | 3   | 20        | J   |
| 1,2-Dichloroethane          | ug/L  | 20            | 18           | 91             |                | 19         | 95           | 4   |           | J   |
| 1,1,1-Trichloroethane       | ug/L  | 20            | 18           | 91             |                | 19         | 95           | 4   |           | J   |
| Carbon Tetrachloride        | ug/L  | 20            | 18           | 91             |                | 19         | 96           | 5   |           | J   |
| Benzene                     | ug/L  | 20            | 19           | 94             | 70 - 130       | 20         | 98           | 4   | 20        | J   |
| Dibromomethane              | ug/L  | 20            | 19           | 97             |                | 20         | 100          | 3   |           | J   |
| 1,2-Dichloropropane         | ug/L  | 20            | 20           | 99             |                | 20         | 100          | 1   |           | J   |
| Trichloroethene             | ug/L  | 20            | 19           | 93             | 70 - 130       | 21         | 106          | 12  | 20        | J   |
| Bromodichloromethane        | ug/L  | 20            | 19           | 95             |                | 20         | 98           | 4   |           | J   |
| cis-1,3-Dichloropropene     | ug/L  | 20            | 17           | 86             |                | 17         | 86           | 0   |           | J   |
| 4-Methyl-2-pentanone (MIB)  | ug/L  | 20            | 18           | 91             |                | 19         | 96           | 6   |           | J   |
| trans-1,3-Dichloropropylene | ug/L  | 20            | 16           | 82             |                | 16         | 80           | 3   |           | J   |
| 1,1,2-Trichloroethane       | ug/L  | 20            | 19           | 96             |                | 20         | 98           | 2   |           | J   |
| Toluene                     | ug/L  | 20            | 19           | 97             | 70 - 130       | 20         | 101          | 4   | 20        | J   |
| 2-Hexanone                  | ug/L  | 20            | 18           | 91             |                | 20         | 101          | 10  |           | J   |
| Dibromochloromethane        | ug/L  | 20            | 18           | 89             |                | 19         | 93           | 5   |           | J   |
| Tetrachloroethylene (PCE)   | ug/L  | 20            | 19           | 95             | 70 - 130       | 19         | 96           | 1   | 20        | J   |
| 1,1,1,2-Tetrachloroethane   | ug/L  | 20            | 19           | 95             |                | 20         | 98           | 3   |           | J   |
| Chlorobenzene               | ug/L  | 20            | 19           | 95             | 70 - 130       | 20         | 99           | 4   | 20        | J   |
| Ethylbenzene                | ug/L  | 20            | 20           | 100            | 70 - 130       | 21         | 103          | 3   | 20        | J   |
| Bromoform                   | ug/L  | 20            | 18           | 90             |                | 18         | 88           | 2   |           | J   |
| Styrene                     | ug/L  | 20            | 19           | 93             |                | 19         | 96           | 3   |           | J   |
| 1,1,2,2-Tetrachloroethane   | ug/L  | 20            | 20           | 101            |                | 19         | 93           | 8   |           | J   |
| 1,2,3-Trichloropropane      | ug/L  | 20            | 22           | 109            |                | 21         | 106          | 3   |           | J   |
| 1,4-Dichlorobenzene         | ug/L  | 20            | 19           | 93             |                | 20         | 101          | 8   |           | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVJ/3427 **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021, J2202333022, J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033, J2202333034, J2202333035

| Parameter           | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|---------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| 1,2-Dichlorobenzene | ug/L  | 20            | 19           | 95             | 70 - 130       | 20         | 102          | 8   | 20        | J   |
| Xylene (Total)      | ug/L  | 60            | 59           | 98             | 70 - 130       | 60         | 100          | 2   | 20        | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 50           | 99             | 70 - 128       | 50         | 100          | 1   |           |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 104            | 86 - 123       | 52         | 103          | 1   |           |     |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 102            | 77 - 119       | 51         | 102          | 0   |           |     |

**Matrix Spike (4217164); Parent Lab Sample (J2202333012)**

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Chloromethane               | ug/L  | 20            | 8.5          | 43             |                | J   |
| <b>Vinyl Chloride</b>       | ug/L  | 20            | 12           | <b>58</b>      | 70 - 130       | J   |
| Bromomethane                | ug/L  | 20            | 3.3          | 17             |                | J   |
| Chloroethane                | ug/L  | 20            | 16           | 79             |                | J   |
| Trichlorofluoromethane      | ug/L  | 20            | 16           | 79             |                | J   |
| Acetone                     | ug/L  | 20            | 19           | 97             |                | J   |
| 1,1-Dichloroethylene        | ug/L  | 20            | 20           | 98             | 70 - 130       | J   |
| Iodomethane (Methyl Iodide) | ug/L  | 20            | 5.4          | 27             |                | J   |
| Acrylonitrile               | ug/L  | 20            | 21           | 104            |                | J   |
| Methylene Chloride          | ug/L  | 20            | 20           | 98             |                | J   |
| Carbon Disulfide            | ug/L  | 20            | 20           | 98             |                | J   |
| trans-1,2-Dichloroethylene  | ug/L  | 20            | 20           | 102            |                | J   |
| 1,1-Dichloroethane          | ug/L  | 20            | 20           | 102            |                | J   |
| Vinyl Acetate               | ug/L  | 20            | 28           | 141            |                | J   |
| 2-Butanone (MEK)            | ug/L  | 20            | 21           | 106            |                | J   |
| cis-1,2-Dichloroethylene    | ug/L  | 20            | 20           | 99             | 70 - 130       | J   |
| Bromochloromethane          | ug/L  | 20            | 23           | 116            |                | J   |
| Chloroform                  | ug/L  | 20            | 20           | 102            | 70 - 130       | J   |
| 1,2-Dichloroethane          | ug/L  | 20            | 20           | 102            |                | J   |
| 1,1,1-Trichloroethane       | ug/L  | 20            | 20           | 99             |                | J   |
| Carbon Tetrachloride        | ug/L  | 20            | 19           | 97             |                | J   |
| Benzene                     | ug/L  | 20            | 20           | 102            | 70 - 130       | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVJ/3427 **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021, J2202333022, J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033, J2202333034, J2202333035

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Dibromomethane              | ug/L  | 20            | 21           | 104            |                | J   |
| 1,2-Dichloropropane         | ug/L  | 20            | 21           | 106            |                | J   |
| Trichloroethene             | ug/L  | 20            | 19           | 96             | 70 - 130       | J   |
| Bromodichloromethane        | ug/L  | 20            | 20           | 102            |                | J   |
| cis-1,3-Dichloropropene     | ug/L  | 20            | 18           | 88             |                | J   |
| 4-Methyl-2-pentanone (MIBK) | ug/L  | 20            | 18           | 92             |                | J   |
| trans-1,3-Dichloropropylene | ug/L  | 20            | 16           | 82             |                | J   |
| 1,1,2-Trichloroethane       | ug/L  | 20            | 20           | 101            |                | J   |
| Toluene                     | ug/L  | 20            | 20           | 100            | 70 - 130       | J   |
| 2-Hexanone                  | ug/L  | 20            | 17           | 86             |                | J   |
| Dibromochloromethane        | ug/L  | 20            | 19           | 95             |                | J   |
| Tetrachloroethylene (PCE)   | ug/L  | 20            | 18           | 91             | 70 - 130       | J   |
| 1,1,1,2-Tetrachloroethane   | ug/L  | 20            | 19           | 97             |                | J   |
| Chlorobenzene               | ug/L  | 20            | 19           | 96             | 70 - 130       | J   |
| Ethylbenzene                | ug/L  | 20            | 20           | 101            | 70 - 130       | J   |
| Bromoform                   | ug/L  | 20            | 17           | 86             |                | J   |
| Styrene                     | ug/L  | 20            | 19           | 93             |                | J   |
| 1,1,1,2-Tetrachloroethane   | ug/L  | 20            | 20           | 102            |                | J   |
| 1,2,3-Trichloropropane      | ug/L  | 20            | 21           | 105            |                | J   |
| 1,4-Dichlorobenzene         | ug/L  | 20            | 20           | 99             |                | J   |
| 1,2-Dichlorobenzene         | ug/L  | 20            | 20           | 100            | 70 - 130       | J   |
| Xylene (Total)              | ug/L  | 60            | 60           | 100            | 70 - 130       | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 50           | 100            | 70 - 128       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 53           | 106            | 86 - 123       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 101            | 77 - 119       |     |

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Workorder: Trail Ridge Landfill (J2202333)

QC Results

QC Batch: MSVJ/3429 Analysis Method: SW-846 8260B  
Preparation Method: SW-846 5030B  
Associated Lab IDs: J2202333036, J2202333037, J2202333038, J2202333039

Method Blank(4217170)

| Parameter                   | Results | Units | PQL | MDL  | Lab |
|-----------------------------|---------|-------|-----|------|-----|
| Chloromethane               | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Vinyl Chloride              | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Bromomethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Chloroethane                | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Trichlorofluoromethane      | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Acetone                     | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,1-Dichloroethylene        | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Iodomethane (Methyl Iodide) | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Acrylonitrile               | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Methylene Chloride          | 1.2 U   | ug/L  | 5.0 | 1.2  | J   |
| Carbon Disulfide            | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| trans-1,2-Dichloroethylene  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,1-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Vinyl Acetate               | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 2-Butanone (MEK)            | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| cis-1,2-Dichloroethylene    | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Bromochloromethane          | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Chloroform                  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,2-Dichloroethane          | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 1,1,1-Trichloroethane       | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Carbon Tetrachloride        | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Benzene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Dibromomethane              | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,2-Dichloropropane         | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Trichloroethene             | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Bromodichloromethane        | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| cis-1,3-Dichloropropene     | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| 4-Methyl-2-pentanone (MIBK) | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| trans-1,3-Dichloropropylene | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| 1,1,2-Trichloroethane       | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Toluene                     | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVJ/3429  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333036, J2202333037, J2202333038, J2202333039

**Analysis Method:** SW-846 8260B

| Parameter                   | Results | Units | PQL | MDL  | Lab |
|-----------------------------|---------|-------|-----|------|-----|
| 2-Hexanone                  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Dibromochloromethane        | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| Tetrachloroethylene (PCE)   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 1,1,1,2-Tetrachloroethane   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Chlorobenzene               | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Ethylbenzene                | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Bromoform                   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| Styrene                     | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,1,1,2,2-Tetrachloroethane | 0.20 U  | ug/L  | 1.0 | 0.20 | J   |
| 1,2,3-Trichloropropane      | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |
| 1,4-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| 1,2-Dichlorobenzene         | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| trans-1,4-Dichloro-2-butene | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |
| Xylene (Total)              | 0.75 U  | ug/L  | 3.0 | 0.75 | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 107            | 70 - 128       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 56           | 111            | 86 - 123       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 101            | 77 - 119       |     |

**Lab Control Sample (4217171); Lab Control Sample Duplicate (4217172)**

| Parameter                  | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chloromethane              | ug/L  | 20            | 14           | 69             |                | 14         | 68           | 2   |           | J   |
| Vinyl Chloride             | ug/L  | 20            | 16           | 80             | 70 - 130       | 16         | 79           | 2   | 20        | J   |
| Bromomethane               | ug/L  | 20            | 5.8          | 29             |                | 7.5        | 37           | 26  |           | J   |
| Chloroethane               | ug/L  | 20            | 18           | 91             |                | 18         | 89           | 2   |           | J   |
| Trichlorofluoromethane     | ug/L  | 20            | 18           | 89             |                | 17         | 86           | 3   |           | J   |
| Acetone                    | ug/L  | 20            | 23           | 117            |                | 22         | 112          | 4   |           | J   |
| 1,1-Dichloroethylene       | ug/L  | 20            | 19           | 95             | 70 - 130       | 19         | 94           | 1   | 20        | J   |
| Iodomethane (Methyl Iodid  | ug/L  | 20            | 6.1          | 31             |                | 6.6        | 33           | 8   |           | J   |
| Acrylonitrile              | ug/L  | 20            | 20           | 99             |                | 19         | 93           | 6   |           | J   |
| Methylene Chloride         | ug/L  | 20            | 20           | 99             |                | 19         | 94           | 5   |           | J   |
| Carbon Disulfide           | ug/L  | 20            | 18           | 89             |                | 18         | 88           | 1   |           | J   |
| trans-1,2-Dichloroethylene | ug/L  | 20            | 20           | 98             |                | 20         | 98           | 0   |           | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVJ/3429  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333036, J2202333037, J2202333038, J2202333039

**Analysis Method:** SW-846 8260B

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| 1,1-Dichloroethane          | ug/L  | 20            | 20           | 98             |                | 20         | 98           | 0   |           | J   |
| Vinyl Acetate               | ug/L  | 20            | 13           | 64             |                | 8          | 40           | 46  |           | J   |
| 2-Butanone (MEK)            | ug/L  | 20            | 22           | 111            |                | 21         | 104          | 7   |           | J   |
| cis-1,2-Dichloroethylene    | ug/L  | 20            | 19           | 96             | 70 - 130       | 19         | 95           | 1   | 20        | J   |
| Bromochloromethane          | ug/L  | 20            | 21           | 107            |                | 22         | 109          | 2   |           | J   |
| Chloroform                  | ug/L  | 20            | 20           | 99             | 70 - 130       | 20         | 98           | 1   | 20        | J   |
| 1,2-Dichloroethane          | ug/L  | 20            | 20           | 101            |                | 19         | 95           | 6   |           | J   |
| 1,1,1-Trichloroethane       | ug/L  | 20            | 19           | 96             |                | 19         | 95           | 1   |           | J   |
| Carbon Tetrachloride        | ug/L  | 20            | 19           | 95             |                | 19         | 96           | 0   |           | J   |
| Benzene                     | ug/L  | 20            | 20           | 99             | 70 - 130       | 20         | 98           | 2   | 20        | J   |
| Dibromomethane              | ug/L  | 20            | 20           | 101            |                | 20         | 100          | 1   |           | J   |
| 1,2-Dichloropropane         | ug/L  | 20            | 20           | 101            |                | 20         | 100          | 1   |           | J   |
| Trichloroethene             | ug/L  | 20            | 21           | 103            | 70 - 130       | 21         | 106          | 3   | 20        | J   |
| Bromodichloromethane        | ug/L  | 20            | 19           | 97             |                | 20         | 98           | 1   |           | J   |
| cis-1,3-Dichloropropene     | ug/L  | 20            | 17           | 86             |                | 17         | 86           | 0   |           | J   |
| 4-Methyl-2-pentanone (MIB)  | ug/L  | 20            | 20           | 101            |                | 19         | 96           | 4   |           | J   |
| trans-1,3-Dichloropropylene | ug/L  | 20            | 16           | 80             |                | 16         | 80           | 0   |           | J   |
| 1,1,2-Trichloroethane       | ug/L  | 20            | 20           | 100            |                | 20         | 98           | 2   |           | J   |
| Toluene                     | ug/L  | 20            | 20           | 98             | 70 - 130       | 20         | 101          | 3   | 20        | J   |
| 2-Hexanone                  | ug/L  | 20            | 20           | 102            |                | 20         | 101          | 1   |           | J   |
| Dibromochloromethane        | ug/L  | 20            | 18           | 91             |                | 19         | 93           | 2   |           | J   |
| Tetrachloroethylene (PCE)   | ug/L  | 20            | 19           | 93             | 70 - 130       | 19         | 96           | 3   | 20        | J   |
| 1,1,1,2-Tetrachloroethane   | ug/L  | 20            | 19           | 96             |                | 20         | 98           | 2   |           | J   |
| Chlorobenzene               | ug/L  | 20            | 19           | 97             | 70 - 130       | 20         | 99           | 2   | 20        | J   |
| Ethylbenzene                | ug/L  | 20            | 20           | 102            | 70 - 130       | 21         | 103          | 1   | 20        | J   |
| Bromoform                   | ug/L  | 20            | 18           | 91             |                | 18         | 88           | 3   |           | J   |
| Styrene                     | ug/L  | 20            | 19           | 93             |                | 19         | 96           | 2   |           | J   |
| 1,1,1,2,2-Tetrachloroethane | ug/L  | 20            | 20           | 98             |                | 19         | 93           | 5   |           | J   |
| 1,2,3-Trichloropropane      | ug/L  | 20            | 21           | 105            |                | 21         | 106          | 1   |           | J   |
| 1,4-Dichlorobenzene         | ug/L  | 20            | 20           | 98             |                | 20         | 101          | 3   |           | J   |
| 1,2-Dichlorobenzene         | ug/L  | 20            | 20           | 102            | 70 - 130       | 20         | 102          | 1   | 20        | J   |
| Xylene (Total)              | ug/L  | 60            | 60           | 100            | 70 - 130       | 60         | 100          | 0   | 20        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVJ/3429      **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333036, J2202333037, J2202333038, J2202333039

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 49           | 99             | 70 - 128       | 50         | 100          | 1   |           |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 50           | 101            | 86 - 123       | 52         | 103          | 2   |           |     |
| Toluene-d8 (S)            | ug/L  | 50            | 50           | 100            | 77 - 119       | 51         | 102          | 2   |           |     |

**Matrix Spike (4217173); Parent Lab Sample (J2202333036)**

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Chloromethane               | ug/L  | 20            | 7.8          | 39             |                | J   |
| <b>Vinyl Chloride</b>       | ug/L  | 20            | 10           | <b>51</b>      | 70 - 130       | J   |
| Bromomethane                | ug/L  | 20            | 3.2          | 16             |                | J   |
| Chloroethane                | ug/L  | 20            | 14           | 70             |                | J   |
| Trichlorofluoromethane      | ug/L  | 20            | 14           | 68             |                | J   |
| Acetone                     | ug/L  | 20            | 20           | 90             |                | J   |
| 1,1-Dichloroethylene        | ug/L  | 20            | 17           | 86             | 70 - 130       | J   |
| Iodomethane (Methyl Iodide) | ug/L  | 20            | 4.6          | 23             |                | J   |
| Acrylonitrile               | ug/L  | 20            | 17           | 86             |                | J   |
| Methylene Chloride          | ug/L  | 20            | 17           | 86             |                | J   |
| Carbon Disulfide            | ug/L  | 20            | 16           | 81             |                | J   |
| trans-1,2-Dichloroethylene  | ug/L  | 20            | 18           | 89             |                | J   |
| 1,1-Dichloroethane          | ug/L  | 20            | 18           | 90             |                | J   |
| Vinyl Acetate               | ug/L  | 20            | 23           | 114            |                | J   |
| 2-Butanone (MEK)            | ug/L  | 20            | 19           | 91             |                | J   |
| cis-1,2-Dichloroethylene    | ug/L  | 20            | 17           | 87             | 70 - 130       | J   |
| Bromochloromethane          | ug/L  | 20            | 20           | 100            |                | J   |
| Chloroform                  | ug/L  | 20            | 18           | 90             | 70 - 130       | J   |
| 1,2-Dichloroethane          | ug/L  | 20            | 18           | 91             |                | J   |
| 1,1,1-Trichloroethane       | ug/L  | 20            | 17           | 87             |                | J   |
| Carbon Tetrachloride        | ug/L  | 20            | 18           | 90             |                | J   |
| Benzene                     | ug/L  | 20            | 18           | 90             | 70 - 130       | J   |
| Dibromomethane              | ug/L  | 20            | 18           | 90             |                | J   |
| 1,2-Dichloropropane         | ug/L  | 20            | 18           | 92             |                | J   |
| Trichloroethene             | ug/L  | 20            | 17           | 86             | 70 - 130       | J   |
| Bromodichloromethane        | ug/L  | 20            | 18           | 90             |                | J   |
| cis-1,3-Dichloropropene     | ug/L  | 20            | 15           | 77             |                | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Batch:** MSVJ/3429 **Analysis Method:** SW-846 8260B  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333036, J2202333037, J2202333038, J2202333039

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 4-Methyl-2-pentanone (MIBK) | ug/L  | 20            | 16           | 80             |                | J   |
| trans-1,3-Dichloropropylene | ug/L  | 20            | 14           | 71             |                | J   |
| 1,1,2-Trichloroethane       | ug/L  | 20            | 17           | 87             |                | J   |
| Toluene                     | ug/L  | 20            | 18           | 90             | 70 - 130       | J   |
| 2-Hexanone                  | ug/L  | 20            | 15           | 77             |                | J   |
| Dibromochloromethane        | ug/L  | 20            | 17           | 86             |                | J   |
| Tetrachloroethylene (PCE)   | ug/L  | 20            | 17           | 84             | 70 - 130       | J   |
| 1,1,1,2-Tetrachloroethane   | ug/L  | 20            | 17           | 86             |                | J   |
| Chlorobenzene               | ug/L  | 20            | 18           | 88             | 70 - 130       | J   |
| Ethylbenzene                | ug/L  | 20            | 18           | 91             | 70 - 130       | J   |
| Bromoform                   | ug/L  | 20            | 16           | 81             |                | J   |
| Styrene                     | ug/L  | 20            | 17           | 83             |                | J   |
| 1,1,1,2-Tetrachloroethane   | ug/L  | 20            | 18           | 92             |                | J   |
| 1,2,3-Trichloropropane      | ug/L  | 20            | 18           | 89             |                | J   |
| 1,4-Dichlorobenzene         | ug/L  | 20            | 17           | 87             |                | J   |
| 1,2-Dichlorobenzene         | ug/L  | 20            | 18           | 89             | 70 - 130       | J   |
| Xylene (Total)              | ug/L  | 60            | 54           | 91             | 70 - 130       | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 104            | 70 - 128       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 104            | 86 - 123       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 102            | 77 - 119       |     |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** MSVJ/3431 **Analysis Method:** SW-846 8260B (SIM)  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021, J2202333022, J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033, J2202333034, J2202333035, J2202333036

**Method Blank(4217187)**

| Parameter                   | Results | Units | PQL  | MDL   | Lab |
|-----------------------------|---------|-------|------|-------|-----|
| Ethylene Dibromide (EDB)    | 0.019 U | ug/L  | 0.10 | 0.019 | J   |
| 1,2-Dibromo-3-Chloropropane | 0.050 U | ug/L  | 0.20 | 0.050 | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 103            | 77 - 125       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 105            | 80 - 121       |     |

**Lab Control Sample (4217188); Lab Control Sample Duplicate (4217189)**

| Parameter                | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD       | RPD Limit | Lab |
|--------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----------|-----------|-----|
| Ethylene Dibromide (EDB) | ug/L  | 0.80          | .84          | 105            | 70 - 130       | .65        | 81           | 26        | 30        | J   |
| 1,2-Dibromo-3-Chloropro  | ug/L  | 0.80          | 2.8          | <b>344</b>     | 70 - 130       | .95        | 119          | <b>97</b> | 30        | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 50           | 100            | 77 - 125       | 50         | 100          | 1   |           |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 103            | 80 - 129       | 52         | 103          | 0   |           |     |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 105            | 80 - 121       | 53         | 105          | 0   |           |     |

**Matrix Spike (4217190); Parent Lab Sample (J2202333013)**

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Ethylene Dibromide (EDB)    | ug/L  | 0.80          | .65          | 81             | 70 - 130       | J   |
| 1,2-Dibromo-3-Chloropropane | ug/L  | 0.80          | .89          | 111            | 70 - 130       | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 50           | 101            | 77 - 125       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 103            | 80 - 129       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 107            | 80 - 121       |     |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** MSVJ/3433 **Analysis Method:** SW-846 8260B (SIM)  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2202333037, J2202333038, J2202333039

**Method Blank(4217204)**

| Parameter                   | Results | Units | PQL  | MDL   | Lab |
|-----------------------------|---------|-------|------|-------|-----|
| Ethylene Dibromide (EDB)    | 0.019 U | ug/L  | 0.10 | 0.019 | J   |
| 1,2-Dibromo-3-Chloropropane | 0.050 U | ug/L  | 0.20 | 0.050 | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 103            | 77 - 125       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 105            | 80 - 121       |     |

**Lab Control Sample (4217205); Lab Control Sample Duplicate (4217206)**

| Parameter                | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|--------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Ethylene Dibromide (EDB) | ug/L  | 0.80          | .84          | 105            | 70 - 130       | .65        | 81           | 26  | 30        | J   |
| 1,2-Dibromo-3-Chloropro  | ug/L  | 0.80          | 2.8          | 344            | 70 - 130       | .95        | 119          | 97  | 30        | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 50           | 100            | 77 - 125       | 50         | 100          | 1   |           |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 103            | 80 - 129       | 52         | 103          | 0   |           |     |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 105            | 80 - 121       | 53         | 105          | 0   |           |     |

**Matrix Spike (4217207); Parent Lab Sample (J2202333037)**

| Parameter                   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Ethylene Dibromide (EDB)    | ug/L  | 0.80          | .7           | 88             | 70 - 130       | J   |
| 1,2-Dibromo-3-Chloropropane | ug/L  | 0.80          | .98          | 123            | 70 - 130       | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 50           | 100            | 77 - 125       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 51           | 102            | 80 - 129       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 53           | 107            | 80 - 121       |     |

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Workorder: Trail Ridge Landfill (J2202333)

## QC Results

QC Batch: WCAg/5522 Analysis Method: EPA 350.1  
Preparation Method: EPA 350.1  
Associated Lab IDs: J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333007

### Method Blank(4214379)

| Parameter   | Results | Units | PQL  | MDL  | Lab |
|-------------|---------|-------|------|------|-----|
| Ammonia (N) | 0.02 U  | mg/L  | 0.04 | 0.02 | G   |

### Lab Control Sample (4214380)

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.50          | .5           | 101            | 90 - 110       | G   |

### Contin. Calib. Verif. SJRWMD (4214381)

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.20          | .2           | 102            | 90 - 110       | G   |

### Matrix Spike (4214382); Matrix Spike Duplicate (4214383); Parent Lab Sample (J2202324001)

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Ammonia (N) | mg/L  | 0.40          | .5           | 100            | 90 - 110       | .5         | 99           | 1   | 10        | G   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5524 **Analysis Method:** EPA 350.1  
**Preparation Method:** EPA 350.1  
**Associated Lab IDs:** J2202333008, J2202333009, J2202333010, J2202333011

**Method Blank(4214396)**

| Parameter   | Results | Units | PQL  | MDL  | Lab |
|-------------|---------|-------|------|------|-----|
| Ammonia (N) | 0.02 U  | mg/L  | 0.04 | 0.02 | G   |

**Lab Control Sample (4214397)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.50          | .5           | 99             | 90 - 110       | G   |

**Contin. Calib. Verif. SJRWMD (4214398)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.20          | .2           | 102            | 90 - 110       | G   |

**Matrix Spike (4214399); Matrix Spike Duplicate (4214400); Parent Lab Sample (J2202333008)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Ammonia (N) | mg/L  | 0.40          | .5           | 96             | 90 - 110       | .5         | 94           | 1   | 10        | G   |

**Method Blank(4214401)**

| Parameter   | Results | Units | PQL  | MDL  | Lab |
|-------------|---------|-------|------|------|-----|
| Ammonia (N) | 0.02 U  | mg/L  | 0.04 | 0.02 | G   |

**Lab Control Sample (4214402)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.50          | .5           | 98             | 90 - 110       | G   |

**Contin. Calib. Verif. SJRWMD (4214403)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.20          | .2           | 94             | 90 - 110       | G   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5524 **Analysis Method:** EPA 350.1  
**Preparation Method:** EPA 350.1  
**Associated Lab IDs:** J2202333009, J2202333010, J2202333011

**Matrix Spike (4214404); Matrix Spike Duplicate (4214405); Parent Lab Sample (A2201516007)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Ammonia (N) | mg/L  | 0.40          | .4           | 98             | 90 - 110       | .4         | 95           | 3   | 10        | G   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5586 **Analysis Method:** SM 5310B  
**Preparation Method:** SM 5310B  
**Associated Lab IDs:** J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033

**Method Blank(4220410)**

| Parameter            | Results | Units | PQL | MDL | Lab |
|----------------------|---------|-------|-----|-----|-----|
| Total Organic Carbon | 1.0 U   | mg/L  | 2.0 | 1.0 | G   |

**Lab Control Sample (4220412)**

| Parameter            | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|----------------------|-------|---------------|--------------|----------------|----------------|-----|
| Total Organic Carbon | mg/L  | 10            | 9            | 92             | 90 - 110       | G   |

**Matrix Spike (4220413); Matrix Spike Duplicate (4220414); Parent Lab Sample (T2203431004)**

| Parameter            | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Total Organic Carbon | mg/L  | 25            | 25           | 100            | 90 - 110       | 25         | 100          | 0   | 10        | G   |

**Method Blank(4220416)**

| Parameter            | Results | Units | PQL | MDL | Lab |
|----------------------|---------|-------|-----|-----|-----|
| Total Organic Carbon | 1.0 U   | mg/L  | 2.0 | 1.0 | G   |





**FINAL**

Workorder: Trail Ridge Landfill (J2202333)

**QC Results**

QC Batch: WCAg/5587 Analysis Method: EPA 410.4  
 Preparation Method: EPA 410.4  
 Associated Lab IDs: J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033

**Method Blank(4220437)**

| Parameter              | Results | Units | PQL | MDL | Lab |
|------------------------|---------|-------|-----|-----|-----|
| Chemical Oxygen Demand | 10 U    | mg/L  | 20  | 10  | G   |

**Lab Control Sample (4220438)**

| Parameter              | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Chemical Oxygen Demand | mg/L  | 500           | 510          | 102            | 90 - 110       | G   |

**Matrix Spike (4220440); Matrix Spike Duplicate (4220441); Parent Lab Sample (J2202295005)**

| Parameter              | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chemical Oxygen Demand | mg/L  | 500           | 529          | 102            | 90 - 110       | 531        | 103          | 0   | 10        | G   |

**Matrix Spike (4220444); Matrix Spike Duplicate (4220445); Parent Lab Sample (G2201626003)**

| Parameter              | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chemical Oxygen Demand | mg/L  | 500           | 527          | 98             | 90 - 110       | 523        | 98           | 1   | 10        | G   |

**Method Blank(4220447)**

| Parameter              | Results | Units | PQL | MDL | Lab |
|------------------------|---------|-------|-----|-----|-----|
| Chemical Oxygen Demand | 10 U    | mg/L  | 20  | 10  | G   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5597 **Analysis Method:** SM 4500NO3-F  
**Preparation Method:** SM 4500NO3-F  
**Associated Lab IDs:** J2202333028, J2202333029, J2202333030

**Method Blank(4220955)**

| Parameter         | Results | Units | PQL | MDL | Lab |
|-------------------|---------|-------|-----|-----|-----|
| Nitrate + Nitrite | 0.1 U   | mg/L  | 0.2 | 0.1 | G   |

**Lab Control Sample (4220956)**

| Parameter         | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------------|-------|---------------|--------------|----------------|----------------|-----|
| Nitrate + Nitrite | mg/L  | 2             | 2.05         | 102            | 90 - 110       | G   |

**Matrix Spike (4220957); Matrix Spike Duplicate (4220958); Parent Lab Sample (G2201632004)**

| Parameter         | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Nitrate + Nitrite | mg/L  | 2             | 2.1          | 105            | 90 - 110       | 2.08       | 104          | 1   | 10        | G   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5598 **Analysis Method:** SM 4500NO3-F  
**Preparation Method:** SM 4500NO3-F  
**Associated Lab IDs:** J2202333031, J2202333032, J2202333033

**Method Blank(4220967)**

| Parameter         | Results | Units | PQL | MDL | Lab |
|-------------------|---------|-------|-----|-----|-----|
| Nitrate + Nitrite | 0.1 U   | mg/L  | 0.2 | 0.1 | G   |

**Lab Control Sample (4220968)**

| Parameter         | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------------|-------|---------------|--------------|----------------|----------------|-----|
| Nitrate + Nitrite | mg/L  | 2             | 2.03         | 102            | 90 - 110       | G   |

**Matrix Spike (4220969); Matrix Spike Duplicate (4220970); Parent Lab Sample (J2202333031)**

| Parameter         | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Nitrate + Nitrite | mg/L  | 2             | 2.09         | 104            | 90 - 110       | 2.11       | 106          | 1   | 10        | G   |

**Method Blank(4220971)**

| Parameter         | Results | Units | PQL | MDL | Lab |
|-------------------|---------|-------|-----|-----|-----|
| Nitrate + Nitrite | 0.1 U   | mg/L  | 0.2 | 0.1 | G   |

**Lab Control Sample (4220972)**

| Parameter         | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------------|-------|---------------|--------------|----------------|----------------|-----|
| Nitrate + Nitrite | mg/L  | 2             | 2.05         | 102            | 90 - 110       | G   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5598 **Analysis Method:** SM 4500NO3-F  
**Preparation Method:** SM 4500NO3-F  
**Associated Lab IDs:** J2202333032, J2202333033

**Matrix Spike (4220973); Matrix Spike Duplicate (4220974); Parent Lab Sample (J2202372002)**

| Parameter         | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Nitrate + Nitrite | mg/L  | 2             | 5.88         | 104            | 90 - 110       | 5.88       | 104          | 0   | 10        | G   |





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Workorder: Trail Ridge Landfill (J2202333)

## QC Results

**QC Batch:** WCAg/5603      **Analysis Method:** EPA 350.1  
**Preparation Method:** EPA 350.1  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017

### Method Blank(422289)

| Parameter   | Results | Units | PQL  | MDL  | Lab |
|-------------|---------|-------|------|------|-----|
| Ammonia (N) | 0.02 U  | mg/L  | 0.04 | 0.02 | G   |

### Lab Control Sample (422290)

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.50          | .5           | 102            | 90 - 110       | G   |

### Contin. Calib. Verif. SJRWMD (422291)

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.20          | .2           | 108            | 90 - 110       | G   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5603      **Analysis Method:** EPA 350.1  
**Preparation Method:** EPA 350.1  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018

**Matrix Spike (4222292); Matrix Spike Duplicate (4222293); Parent Lab Sample (J2202316001)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Ammonia (N) | mg/L  | 0.40          | .5           | 107            | 90 - 110       | .5         | 106          | 1   | 10        | G   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5603      **Analysis Method:** EPA 350.1  
**Preparation Method:** EPA 350.1  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014, J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021, J2202333023, J2202333024, J2202333025, J2202333026, J2202333027, J2202333028

**Method Blank(4222294)**

| Parameter   | Results | Units | PQL  | MDL  | Lab |
|-------------|---------|-------|------|------|-----|
| Ammonia (N) | 0.02 U  | mg/L  | 0.04 | 0.02 | G   |

**Lab Control Sample (4222295)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.50          | .5           | 99             | 90 - 110       | G   |

**Contin. Calib. Verif. SJRWMD (4222296)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.20          | .2           | 107            | 90 - 110       | G   |







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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5603 **Analysis Method:** EPA 350.1  
**Preparation Method:** EPA 350.1  
**Associated Lab IDs:** J2202333018, J2202333019, J2202333020, J2202333021, J2202333023, J2202333024, J2202333025, J2202333026, J2202333027, J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033, J2202333035, J2202333036, J2202333037, J2202333038, J2202333040

**Method Blank(422299)**

| Parameter   | Results | Units | PQL  | MDL  | Lab |
|-------------|---------|-------|------|------|-----|
| Ammonia (N) | 0.02 U  | mg/L  | 0.04 | 0.02 | G   |

**Lab Control Sample (4222300)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.50          | .5           | 103            | 90 - 110       | G   |

**Contin. Calib. Verif. SJRWMD (4222301)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.20          | .2           | 104            | 90 - 110       | G   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5603 **Analysis Method:** EPA 350.1  
**Preparation Method:** EPA 350.1  
**Associated Lab IDs:** J2202333029, J2202333030, J2202333031, J2202333032, J2202333033, J2202333035, J2202333036, J2202333037, J2202333038, J2202333040, J2202333041

**Method Blank(4222304)**

| Parameter   | Results | Units | PQL  | MDL  | Lab |
|-------------|---------|-------|------|------|-----|
| Ammonia (N) | 0.02 U  | mg/L  | 0.04 | 0.02 | G   |

**Lab Control Sample (4222305)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.50          | .5           | 104            | 90 - 110       | G   |

**Contin. Calib. Verif. SJRWMD (4222306)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.20          | .2           | 109            | 90 - 110       | G   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5603  
**Preparation Method:** EPA 350.1  
**Associated Lab IDs:** J2202333041

**Analysis Method:** EPA 350.1

**Method Blank(4222309)**

| Parameter   | Results | Units | PQL  | MDL  | Lab |
|-------------|---------|-------|------|------|-----|
| Ammonia (N) | 0.02 U  | mg/L  | 0.04 | 0.02 | G   |

**Lab Control Sample (4222310)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.50          | .5           | 102            | 90 - 110       | G   |

**Contin. Calib. Verif. SJRWMD (4222311)**

| Parameter   | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------|-------|---------------|--------------|----------------|----------------|-----|
| Ammonia (N) | mg/L  | 0.20          | .2           | 110            | 90 - 110       | G   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5606 **Analysis Method:** SM 10200 H  
**Preparation Method:** SM 10200 H  
**Associated Lab IDs:** J2202333028, J2202333029, J2202333030

**Method Blank(4222566)**

| Parameter               | Results | Units | PQL | MDL | Lab |
|-------------------------|---------|-------|-----|-----|-----|
| Corrected Chlorophyll A | 2.5 U   | mg/m3 | 3.0 | 2.5 | G   |

**Sample Duplicate (4222567)**

| Parameter               | Original | Duplicate | Units | RPD | RPD Limit | Lab |
|-------------------------|----------|-----------|-------|-----|-----------|-----|
| Corrected Chlorophyll A | 2        | 2         | mg/m3 | 0   | 35        | G   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5609 **Analysis Method:** SM 10200 H  
**Preparation Method:** SM 10200 H  
**Associated Lab IDs:** J2202333031, J2202333032, J2202333033

**Method Blank(4223315)**

| Parameter               | Results | Units | PQL | MDL | Lab |
|-------------------------|---------|-------|-----|-----|-----|
| Corrected Chlorophyll A | 2.5 U   | mg/m3 | 3.0 | 2.5 | G   |

**Sample Duplicate (4223316)**

| Parameter               | Original | Duplicate | Units | RPD | RPD Limit | Lab |
|-------------------------|----------|-----------|-------|-----|-----------|-----|
| Corrected Chlorophyll A | 14.42    | 15.22     | mg/m3 | 5   | 35        | G   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5676 **Analysis Method:** EPA 351.2  
**Preparation Method:** Copper Sulfate Digestion  
**Associated Lab IDs:** J2202333028, J2202333029, J2202333030, J2202333031

**Method Blank(4229017)**

| Parameter               | Results | Units | PQL  | MDL  | Lab |
|-------------------------|---------|-------|------|------|-----|
| Total Kjeldahl Nitrogen | 0.20 U  | mg/L  | 0.50 | 0.20 | G   |

**Lab Control Sample (4229019)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Total Kjeldahl Nitrogen | mg/L  | 1             | 1.02         | 102            | 90 - 110       | G   |

**Matrix Spike (4229021); Matrix Spike Duplicate (4229023); Parent Lab Sample (A2201875005)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Total Kjeldahl Nitrogen | mg/L  | 1             | 2.98         | 97             | 80 - 120       | 2.91       | 90           | 2   | 20        | G   |

**Matrix Spike (4229025); Matrix Spike Duplicate (4229027); Parent Lab Sample (J2202333031)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Total Kjeldahl Nitrogen | mg/L  | 1             | .81          | 80             | 80 - 120       | 1          | 100          | 22  | 20        | G   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5677 **Analysis Method:** EPA 365.4  
**Preparation Method:** Copper Sulfate Digestion  
**Associated Lab IDs:** J2202333028, J2202333029, J2202333030, J2202333031

**Method Blank(4229018)**

| Parameter               | Results | Units | PQL | MDL  | Lab |
|-------------------------|---------|-------|-----|------|-----|
| Total Phosphorus (as P) | 0.50 U  | mg/L  | 1.0 | 0.50 | G   |

**Lab Control Sample (4229020)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Total Phosphorus (as P) | mg/L  | 1             | .96          | 96             | 90 - 110       | G   |

**Matrix Spike (4229022); Matrix Spike Duplicate (4229024); Parent Lab Sample (A2201875005)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Total Phosphorus (as P) | mg/L  | 1             | 4.3          | 200            | 80 - 120       | 4.3        | 206          | 1   | 20        | G   |

**Matrix Spike (4229026); Matrix Spike Duplicate (4229028); Parent Lab Sample (J2202333031)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Total Phosphorus (as P) | mg/L  | 1             | .81          | 81             | 80 - 120       | 1.1        | 110          | 30  | 20        | G   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5678  
**Preparation Method:** Copper Sulfate Digestion  
**Associated Lab IDs:** J2202333032, J2202333033

**Analysis Method:** EPA 351.2

**Method Blank(4229054)**

| Parameter               | Results | Units | PQL  | MDL  | Lab |
|-------------------------|---------|-------|------|------|-----|
| Total Kjeldahl Nitrogen | 0.20 U  | mg/L  | 0.50 | 0.20 | G   |

**Lab Control Sample (4229056)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Total Kjeldahl Nitrogen | mg/L  | 1             | 1            | 100            | 90 - 110       | G   |

**Matrix Spike (4229058); Matrix Spike Duplicate (4229060); Parent Lab Sample (A2201740003)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Total Kjeldahl Nitrogen | mg/L  | 1             | 5.55         | 102            | 80 - 120       | 5.81       | 128          | 5   | 20        | G   |

**Matrix Spike (4229062); Matrix Spike Duplicate (4229064); Parent Lab Sample (G2201584001)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Total Kjeldahl Nitrogen | mg/L  | 1             | 1.91         | 95             | 80 - 120       | 2.06       | 110          | 8   | 20        | G   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAg/5679  
**Preparation Method:** Copper Sulfate Digestion  
**Associated Lab IDs:** J2202333032, J2202333033

**Analysis Method:** EPA 365.4

**Method Blank(4229055)**

| Parameter               | Results | Units | PQL | MDL  | Lab |
|-------------------------|---------|-------|-----|------|-----|
| Total Phosphorus (as P) | 0.50 U  | mg/L  | 1.0 | 0.50 | G   |

**Lab Control Sample (4229057)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Total Phosphorus (as P) | mg/L  | 1             | .92          | 92             | 90 - 110       | G   |

**Matrix Spike (4229059); Matrix Spike Duplicate (4229061); Parent Lab Sample (A2201740003)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Total Phosphorus (as P) | mg/L  | 1             | 1.3          | 128            | 80 - 120       | 1.4        | 144          | 11  | 20        | G   |

**Matrix Spike (4229063); Matrix Spike Duplicate (4229065); Parent Lab Sample (G2201584001)**

| Parameter               | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Total Phosphorus (as P) | mg/L  | 1             | 3.1          | 137            | 80 - 120       | 3.2        | 142          | 2   | 20        | G   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAj/5096 **Analysis Method:** EPA 300.0  
**Preparation Method:** EPA 300.0  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005

**Matrix Spike (4213483); Parent Lab Sample (J2202363001)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|-----|
| Nitrate (as N) | mg/L  | 2             | 2.2          | 86             | 90 - 110       | J   |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAj/5096 **Analysis Method:** EPA 300.0  
**Preparation Method:** EPA 300.0  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333007, J2202333008, J2202333009, J2202333010, J2202333011

**Method Blank(4213480)**

| Parameter      | Results | Units | PQL  | MDL  | Lab |
|----------------|---------|-------|------|------|-----|
| Chloride       | 2.0 U   | mg/L  | 8.0  | 2.0  | J   |
| Nitrate (as N) | 0.20 U  | mg/L  | 0.80 | 0.20 | J   |

**Lab Control Sample (4213481); Lab Control Sample Duplicate (4213482)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chloride       | mg/L  | 20            | 20           | 98             | 90 - 110       | 20         | 99           | 0   | 10        | J   |
| Nitrate (as N) | mg/L  | 2             | 1.8          | 91             | 90 - 110       | 1.9        | 94           | 3   | 10        | J   |

**Matrix Spike (4213484); Parent Lab Sample (J2202333007)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|-----|
| Chloride       | mg/L  | 20            | 24           | 94             | 90 - 110       | J   |
| Nitrate (as N) | mg/L  | 2             | 1.9          | 97             | 90 - 110       | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAj/5111 **Analysis Method:** EPA 300.0  
**Preparation Method:** EPA 300.0  
**Associated Lab IDs:** J2202333012, J2202333013, J2202333014

**Method Blank(4214875)**

| Parameter      | Results | Units | PQL  | MDL  | Lab |
|----------------|---------|-------|------|------|-----|
| Chloride       | 2.0 U   | mg/L  | 8.0  | 2.0  | J   |
| Nitrate (as N) | 0.20 U  | mg/L  | 0.80 | 0.20 | J   |

**Lab Control Sample (4214876); Lab Control Sample Duplicate (4214877)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chloride       | mg/L  | 20            | 19           | 97             | 90 - 110       | 20         | 98           | 1   | 10        | J   |
| Nitrate (as N) | mg/L  | 2             | 1.9          | 95             | 90 - 110       | 1.9        | 96           | 1   | 10        | J   |

**Matrix Spike (4214878); Parent Lab Sample (J2202410002)**

| Parameter             | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------------|-------|---------------|--------------|----------------|----------------|-----|
| Chloride              | mg/L  | 20            | 45           | 91             | 90 - 110       | J   |
| <b>Nitrate (as N)</b> | mg/L  | 2             | 12           | <b>85</b>      | 90 - 110       | J   |

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Workorder: Trail Ridge Landfill (J2202333)

### QC Results

QC Batch: WCAj/5122 Analysis Method: SM 5210B  
Preparation Method: SM 5210B  
Associated Lab IDs: J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033

#### Method Blank(4216624)

| Parameter                 | Results | Units | PQL | MDL | Lab |
|---------------------------|---------|-------|-----|-----|-----|
| Biochemical Oxygen Demand | 2.0 U   | mg/L  | 2.0 | 2.0 | J   |

#### Lab Control Sample (4216625)

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Biochemical Oxygen Demand | mg/L  | 198           | 120          | 61             | 84.60 - 115.40 | J   |

#### Sample Duplicate (4216626)

| Parameter                 | Original | Duplicate | Units | RPD | RPD Limit | Lab |
|---------------------------|----------|-----------|-------|-----|-----------|-----|
| Biochemical Oxygen Demand | 8.28     | 7.98      | mg/L  | 4   | 20        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAj/5124 **Analysis Method:** EPA 300.0  
**Preparation Method:** EPA 300.0  
**Associated Lab IDs:** J2202333015, J2202333016, J2202333017, J2202333018, J2202333019, J2202333020, J2202333021, J2202333023, J2202333024, J2202333025

**Method Blank(4216921)**

| Parameter      | Results | Units | PQL  | MDL  | Lab |
|----------------|---------|-------|------|------|-----|
| Chloride       | 2.0 U   | mg/L  | 8.0  | 2.0  | J   |
| Nitrate (as N) | 0.20 U  | mg/L  | 0.80 | 0.20 | J   |

**Lab Control Sample (4216922); Lab Control Sample Duplicate (4216923)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chloride       | mg/L  | 20            | 20           | 99             | 90 - 110       | 20         | 100          | 1   | 10        | J   |
| Nitrate (as N) | mg/L  | 2             | 1.9          | 95             | 90 - 110       | 2          | 99           | 4   | 10        | J   |

**Matrix Spike (4216924); Parent Lab Sample (J2202333016)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|-----|
| Chloride       | mg/L  | 20            | 34           | 94             | 90 - 110       | J   |
| Nitrate (as N) | mg/L  | 2             | 1.9          | 85             | 90 - 110       | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAj/5127 **Analysis Method:** EPA 300.0  
**Preparation Method:** EPA 300.0  
**Associated Lab IDs:** J2202333026, J2202333027, J2202333032, J2202333033, J2202333035, J2202333037, J2202333038, J2202333040, J2202333041

**Method Blank(4217810)**

| Parameter      | Results | Units | PQL  | MDL  | Lab |
|----------------|---------|-------|------|------|-----|
| Chloride       | 2.0 U   | mg/L  | 8.0  | 2.0  | J   |
| Nitrate (as N) | 0.20 U  | mg/L  | 0.80 | 0.20 | J   |

**Lab Control Sample (4217811); Lab Control Sample Duplicate (4217812)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chloride       | mg/L  | 20            | 20           | 99             | 90 - 110       | 20         | 100          | 1   | 10        | J   |
| Nitrate (as N) | mg/L  | 2             | 2            | 98             | 90 - 110       | 2          | 100          | 2   | 10        | J   |

**Matrix Spike (4217813); Parent Lab Sample (J2202333026)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|-----|
| Chloride       | mg/L  | 20            | 24           | 95             | 90 - 110       | J   |
| Nitrate (as N) | mg/L  | 2             | 1.9          | 96             | 90 - 110       | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAj/5131 **Analysis Method:** SM 2540 C  
**Preparation Method:** SM 2540 C  
**Associated Lab IDs:** J2202333001, J2202333002, J2202333003, J2202333004, J2202333005, J2202333007, J2202333008, J2202333009, J2202333010, J2202333011, J2202333012, J2202333014, J2202333017, J2202333018, J2202333021, J2202333024, J2202333026, J2202333036, J2202333038, J2202333040

**Method Blank(4218303)**

| Parameter              | Results | Units | PQL | MDL | Lab |
|------------------------|---------|-------|-----|-----|-----|
| Total Dissolved Solids | 10 U    | mg/L  | 10  | 10  | J   |

**Lab Control Sample (4218304)**

| Parameter              | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Total Dissolved Solids | mg/L  | 300           | 300          | 100            | 85 - 115       | J   |

**Sample Duplicate (4218305)**

| Parameter              | Original | Duplicate | Units | RPD | RPD Limit | Lab |
|------------------------|----------|-----------|-------|-----|-----------|-----|
| Total Dissolved Solids | 463      | 460       | mg/L  | 1   | 10        | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAj/5132      **Analysis Method:** EPA 300.0  
**Preparation Method:** EPA 300.0  
**Associated Lab IDs:** J2202333028, J2202333029, J2202333030, J2202333031, J2202333036

**Method Blank(4218312)**

| Parameter      | Results | Units | PQL  | MDL  | Lab |
|----------------|---------|-------|------|------|-----|
| Chloride       | 2.0 U   | mg/L  | 8.0  | 2.0  | J   |
| Nitrate (as N) | 0.20 U  | mg/L  | 0.80 | 0.20 | J   |

**Lab Control Sample (4218313); Lab Control Sample Duplicate (4218314)**

| Parameter      | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|----------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chloride       | mg/L  | 20            | 20           | 100            | 90 - 110       | 20         | 100          | 0   | 10        | J   |
| Nitrate (as N) | mg/L  | 2             | 2            | 100            | 90 - 110       | 2          | 99           | 1   | 10        | J   |

**Matrix Spike (4218315); Parent Lab Sample (J2202333036)**

| Parameter       | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------------|-------|---------------|--------------|----------------|----------------|-----|
| <b>Chloride</b> | mg/L  | 20            | 120          | <b>49</b>      | 90 - 110       | J   |
| Nitrate (as N)  | mg/L  | 2             | 3            | 90             | 90 - 110       | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAj/5147 **Analysis Method:** SM 2540 C  
**Preparation Method:** SM 2540 C  
**Associated Lab IDs:** J2202333010, J2202333013, J2202333015, J2202333016, J2202333019, J2202333020, J2202333023, J2202333025, J2202333027, J2202333035, J2202333037, J2202333041

**Method Blank(4220424)**

| Parameter              | Results | Units | PQL | MDL | Lab |
|------------------------|---------|-------|-----|-----|-----|
| Total Dissolved Solids | 10 U    | mg/L  | 10  | 10  | J   |

**Lab Control Sample (4220425)**

| Parameter              | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Total Dissolved Solids | mg/L  | 300           | 314          | 105            | 85 - 115       | J   |

**Sample Duplicate (4220426)**

| Parameter              | Original | Duplicate | Units | RPD | RPD Limit | Lab |
|------------------------|----------|-----------|-------|-----|-----------|-----|
| Total Dissolved Solids | 34       | 35        | mg/L  | 3   | 10        | J   |







FINAL

Workorder: Trail Ridge Landfill (J2202333)

QC Results

QC Batch: WCAj/5168 Analysis Method: SM 2540D  
Preparation Method: SM 2540D  
Associated Lab IDs: J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033

Method Blank(4222847)

| Parameter              | Results | Units | PQL | MDL | Lab |
|------------------------|---------|-------|-----|-----|-----|
| Total Suspended Solids | 2.0 U   | mg/L  | 2.0 | 2.0 | J   |

Lab Control Sample (4222848)

| Parameter              | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Total Suspended Solids | mg/L  | 100           | 102          | 102            | 85 - 115       | J   |

Sample Duplicate (4222977)

| Parameter              | Original | Duplicate | Units | RPD | RPD Limit | Lab |
|------------------------|----------|-----------|-------|-----|-----------|-----|
| Total Suspended Solids | 10       | 4         | mg/L  | 86  | 10        | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Results**

**QC Batch:** WCAj/5170 **Analysis Method:** SM 2540 C  
**Preparation Method:** SM 2540 C  
**Associated Lab IDs:** J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, J2202333033

**Method Blank(4222949)**

| Parameter              | Results | Units | PQL | MDL | Lab |
|------------------------|---------|-------|-----|-----|-----|
| Total Dissolved Solids | 10 U    | mg/L  | 10  | 10  | J   |

**Lab Control Sample (4222950)**

| Parameter              | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|------------------------|-------|---------------|--------------|----------------|----------------|-----|
| Total Dissolved Solids | mg/L  | 300           | 313          | 104            | 85 - 115       | J   |

**Sample Duplicate (4222951)**

| Parameter              | Original | Duplicate | Units | RPD | RPD Limit | Lab |
|------------------------|----------|-----------|-------|-----|-----------|-----|
| Total Dissolved Solids | 196      | 80        | mg/L  | 84  | 10        | J   |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Cross Reference**

| Lab ID                          | Sample ID         | Prep Batch | Prep Method  |
|---------------------------------|-------------------|------------|--------------|
| <b>CVAj/1422 - EPA 245.1</b>    |                   |            |              |
| J2202333028                     | SW-5              | DGMj/2908  | EPA 245.1    |
| J2202333029                     | SW-6              | DGMj/2908  | EPA 245.1    |
| J2202333030                     | SW-7              | DGMj/2908  | EPA 245.1    |
| J2202333031                     | SW-4              | DGMj/2908  | EPA 245.1    |
| J2202333032                     | SW-3              | DGMj/2908  | EPA 245.1    |
| J2202333033                     | SW-1              | DGMj/2908  | EPA 245.1    |
| <b>CVAj/1424 - SW-846 7470A</b> |                   |            |              |
| J2202333001                     | MWB22S            | DGMj/2922  | SW-846 7470A |
| J2202333002                     | MWB12S            | DGMj/2922  | SW-846 7470A |
| J2202333003                     | MWB13S            | DGMj/2922  | SW-846 7470A |
| J2202333004                     | MWB27S            | DGMj/2922  | SW-846 7470A |
| J2202333005                     | MWB29S            | DGMj/2922  | SW-846 7470A |
| J2202333012                     | MWB-35S           | DGMj/2922  | SW-846 7470A |
| <b>CVAj/1425 - SW-846 7470A</b> |                   |            |              |
| J2202333013                     | MWB-3S            | DGMj/2923  | SW-846 7470A |
| J2202333014                     | MWB-2S            | DGMj/2923  | SW-846 7470A |
| J2202333015                     | MWB-32S           | DGMj/2923  | SW-846 7470A |
| J2202333016                     | MWB-33S           | DGMj/2923  | SW-846 7470A |
| J2202333017                     | MWB-34S           | DGMj/2923  | SW-846 7470A |
| J2202333018                     | MWB-39S           | DGMj/2923  | SW-846 7470A |
| J2202333019                     | MWB-40S           | DGMj/2923  | SW-846 7470A |
| J2202333020                     | MWB-21S           | DGMj/2923  | SW-846 7470A |
| J2202333021                     | MWB-20S           | DGMj/2923  | SW-846 7470A |
| J2202333035                     | EQUIPMENT BLANK 2 | DGMj/2923  | SW-846 7470A |
| J2202333036                     | SGMW-1SR          | DGMj/2923  | SW-846 7470A |
| J2202333037                     | SGMW-2S           | DGMj/2923  | SW-846 7470A |
| J2202333038                     | MWB-11S           | DGMj/2923  | SW-846 7470A |
| <b>ICMj/1780 - SW-846 6020</b>  |                   |            |              |
| J2202333001                     | MWB22S            | DGMj/2878  | SW-846 3010A |
| J2202333002                     | MWB12S            | DGMj/2878  | SW-846 3010A |
| J2202333003                     | MWB13S            | DGMj/2878  | SW-846 3010A |
| J2202333004                     | MWB27S            | DGMj/2878  | SW-846 3010A |
| J2202333005                     | MWB29S            | DGMj/2878  | SW-846 3010A |





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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Cross Reference**

| Lab ID                         | Sample ID         | Prep Batch | Prep Method  |
|--------------------------------|-------------------|------------|--------------|
| <b>ICMj/1782 - SW-846 6020</b> |                   |            |              |
| J2202333012                    | MWB-35S           | DGMj/2881  | SW-846 3010A |
| J2202333013                    | MWB-3S            | DGMj/2881  | SW-846 3010A |
| J2202333014                    | MWB-2S            | DGMj/2881  | SW-846 3010A |
| J2202333015                    | MWB-32S           | DGMj/2881  | SW-846 3010A |
| J2202333016                    | MWB-33S           | DGMj/2881  | SW-846 3010A |
| J2202333017                    | MWB-34S           | DGMj/2881  | SW-846 3010A |
| J2202333018                    | MWB-39S           | DGMj/2881  | SW-846 3010A |
| J2202333019                    | MWB-40S           | DGMj/2881  | SW-846 3010A |
| J2202333020                    | MWB-21S           | DGMj/2881  | SW-846 3010A |
| J2202333021                    | MWB-20S           | DGMj/2881  | SW-846 3010A |
| <b>ICMj/1786 - SW-846 6020</b> |                   |            |              |
| J2202333028                    | SW-5              | DGMj/2896  | SW-846 3010A |
| J2202333029                    | SW-6              | DGMj/2896  | SW-846 3010A |
| J2202333030                    | SW-7              | DGMj/2896  | SW-846 3010A |
| J2202333031                    | SW-4              | DGMj/2896  | SW-846 3010A |
| J2202333032                    | SW-3              | DGMj/2896  | SW-846 3010A |
| J2202333033                    | SW-1              | DGMj/2896  | SW-846 3010A |
| J2202333035                    | EQUIPMENT BLANK 2 | DGMj/2896  | SW-846 3010A |
| J2202333036                    | SGMW-1SR          | DGMj/2896  | SW-846 3010A |
| J2202333037                    | SGMW-2S           | DGMj/2896  | SW-846 3010A |
| J2202333038                    | MWB-11S           | DGMj/2896  | SW-846 3010A |
| <b>ICPj/1746 - SW-846 6010</b> |                   |            |              |
| J2202333001                    | MWB22S            | DGMj/2884  | SW-846 3010A |
| J2202333002                    | MWB12S            | DGMj/2884  | SW-846 3010A |
| J2202333003                    | MWB13S            | DGMj/2884  | SW-846 3010A |
| J2202333004                    | MWB27S            | DGMj/2884  | SW-846 3010A |
| J2202333005                    | MWB29S            | DGMj/2884  | SW-846 3010A |
| J2202333007                    | MWB13I            | DGMj/2884  | SW-846 3010A |
| J2202333008                    | MWB27I            | DGMj/2884  | SW-846 3010A |
| J2202333009                    | MWB29I            | DGMj/2884  | SW-846 3010A |
| J2202333010                    | MWB12I            | DGMj/2884  | SW-846 3010A |
| J2202333011                    | EQUIPMENT BLANK   | DGMj/2884  | SW-846 3010A |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Cross Reference**

| Lab ID                         | Sample ID         | Prep Batch | Prep Method  |
|--------------------------------|-------------------|------------|--------------|
| <b>ICPj/1750 - SW-846 6010</b> |                   |            |              |
| J2202333012                    | MWB-35S           | DGMj/2898  | SW-846 3010A |
| J2202333013                    | MWB-3S            | DGMj/2898  | SW-846 3010A |
| J2202333014                    | MWB-2S            | DGMj/2898  | SW-846 3010A |
| J2202333015                    | MWB-32S           | DGMj/2898  | SW-846 3010A |
| J2202333016                    | MWB-33S           | DGMj/2898  | SW-846 3010A |
| J2202333017                    | MWB-34S           | DGMj/2898  | SW-846 3010A |
| J2202333018                    | MWB-39S           | DGMj/2898  | SW-846 3010A |
| J2202333019                    | MWB-40S           | DGMj/2898  | SW-846 3010A |
| J2202333020                    | MWB-21S           | DGMj/2898  | SW-846 3010A |
| <b>ICPj/1758 - SW-846 6010</b> |                   |            |              |
| J2202333021                    | MWB-20S           | DGMj/2919  | SW-846 3010A |
| J2202333023                    | MWB-2I            | DGMj/2919  | SW-846 3010A |
| J2202333024                    | MWB-3I            | DGMj/2919  | SW-846 3010A |
| J2202333025                    | MWB-35I           | DGMj/2919  | SW-846 3010A |
| J2202333026                    | MWB-32I           | DGMj/2919  | SW-846 3010A |
| J2202333027                    | MWB-34I           | DGMj/2919  | SW-846 3010A |
| J2202333028                    | SW-5              | DGMj/2919  | SW-846 3010A |
| J2202333029                    | SW-6              | DGMj/2919  | SW-846 3010A |
| J2202333030                    | SW-7              | DGMj/2919  | SW-846 3010A |
| <b>ICPj/1761 - SW-846 6010</b> |                   |            |              |
| J2202333031                    | SW-4              | DGMj/2928  | SW-846 3010A |
| J2202333032                    | SW-3              | DGMj/2928  | SW-846 3010A |
| J2202333033                    | SW-1              | DGMj/2928  | SW-846 3010A |
| J2202333035                    | EQUIPMENT BLANK 2 | DGMj/2928  | SW-846 3010A |
| J2202333036                    | SGMW-1SR          | DGMj/2928  | SW-846 3010A |
| J2202333037                    | SGMW-2S           | DGMj/2928  | SW-846 3010A |
| J2202333038                    | MWB-11S           | DGMj/2928  | SW-846 3010A |
| J2202333040                    | MWB39I            | DGMj/2928  | SW-846 3010A |
| J2202333041                    | MWB11I(R)         | DGMj/2928  | SW-846 3010A |





FINAL

Workorder: Trail Ridge Landfill (J2202333)

### QC Cross Reference

| Lab ID   | Sample ID | Prep Batch | Prep Method  |
|--|-----------|------------|--------------|
| <b>MICj/2607 - COLILERT-18 (Fecal Coliforms)</b> |           |            |              |
| J2202333028                                      | SW-5      |            |              |
| J2202333029                                      | SW-6      |            |              |
| J2202333030                                      | SW-7      |            |              |
| J2202333031                                      | SW-4      |            |              |
| J2202333032                                      | SW-3      |            |              |
| J2202333033                                      | SW-1      |            |              |
| <b>MSVj/3401 - SW-846 8260B (SIM)</b>            |           |            |              |
| J2202333001                                      | MWB22S    | MSVj/3398  | SW-846 5030B |
| J2202333002                                      | MWB12S    | MSVj/3398  | SW-846 5030B |
| J2202333003                                      | MWB13S    | MSVj/3398  | SW-846 5030B |
| J2202333004                                      | MWB27S    | MSVj/3398  | SW-846 5030B |
| J2202333005                                      | MWB29S    | MSVj/3398  | SW-846 5030B |
| J2202333006                                      | TRIP      | MSVj/3398  | SW-846 5030B |
| <b>MSVj/3410 - SW-846 8260B</b>                  |           |            |              |
| J2202333001                                      | MWB22S    | MSVj/3409  | SW-846 5030B |
| J2202333002                                      | MWB12S    | MSVj/3409  | SW-846 5030B |
| J2202333003                                      | MWB13S    | MSVj/3409  | SW-846 5030B |
| J2202333004                                      | MWB27S    | MSVj/3409  | SW-846 5030B |
| J2202333005                                      | MWB29S    | MSVj/3409  | SW-846 5030B |
| J2202333006                                      | TRIP      | MSVj/3409  | SW-846 5030B |

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**Workorder:** Trail Ridge Landfill (J2202333)

**QC Cross Reference**

| Lab ID                          | Sample ID         | Prep Batch | Prep Method  |
|---------------------------------|-------------------|------------|--------------|
| <b>MSVj/3427 - SW-846 8260B</b> |                   |            |              |
| J2202333012                     | MWB-35S           | MSVj/3426  | SW-846 5030B |
| J2202333013                     | MWB-3S            | MSVj/3426  | SW-846 5030B |
| J2202333014                     | MWB-2S            | MSVj/3426  | SW-846 5030B |
| J2202333015                     | MWB-32S           | MSVj/3426  | SW-846 5030B |
| J2202333016                     | MWB-33S           | MSVj/3426  | SW-846 5030B |
| J2202333017                     | MWB-34S           | MSVj/3426  | SW-846 5030B |
| J2202333018                     | MWB-39S           | MSVj/3426  | SW-846 5030B |
| J2202333019                     | MWB-40S           | MSVj/3426  | SW-846 5030B |
| J2202333020                     | MWB-21S           | MSVj/3426  | SW-846 5030B |
| J2202333021                     | MWB-20S           | MSVj/3426  | SW-846 5030B |
| J2202333022                     | TRIP BLANK 2      | MSVj/3426  | SW-846 5030B |
| J2202333028                     | SW-5              | MSVj/3426  | SW-846 5030B |
| J2202333029                     | SW-6              | MSVj/3426  | SW-846 5030B |
| J2202333030                     | SW-7              | MSVj/3426  | SW-846 5030B |
| J2202333031                     | SW-4              | MSVj/3426  | SW-846 5030B |
| J2202333032                     | SW-3              | MSVj/3426  | SW-846 5030B |
| J2202333033                     | SW-1              | MSVj/3426  | SW-846 5030B |
| J2202333034                     | Trip Blank 1      | MSVj/3426  | SW-846 5030B |
| J2202333035                     | EQUIPMENT BLANK 2 | MSVj/3426  | SW-846 5030B |
| <b>MSVj/3429 - SW-846 8260B</b> |                   |            |              |
| J2202333036                     | SGMW-1SR          | MSVj/3428  | SW-846 5030B |
| J2202333037                     | SGMW-2S           | MSVj/3428  | SW-846 5030B |
| J2202333038                     | MWB-11S           | MSVj/3428  | SW-846 5030B |
| J2202333039                     | TRIP BLANK 3      | MSVj/3428  | SW-846 5030B |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Cross Reference**

| Lab ID                                | Sample ID         | Prep Batch | Prep Method  |
|---------------------------------------|-------------------|------------|--------------|
| <b>MSVj/3431 - SW-846 8260B (SIM)</b> |                   |            |              |
| J2202333012                           | MWB-35S           | MSVj/3430  | SW-846 5030B |
| J2202333013                           | MWB-3S            | MSVj/3430  | SW-846 5030B |
| J2202333014                           | MWB-2S            | MSVj/3430  | SW-846 5030B |
| J2202333015                           | MWB-32S           | MSVj/3430  | SW-846 5030B |
| J2202333016                           | MWB-33S           | MSVj/3430  | SW-846 5030B |
| J2202333017                           | MWB-34S           | MSVj/3430  | SW-846 5030B |
| J2202333018                           | MWB-39S           | MSVj/3430  | SW-846 5030B |
| J2202333019                           | MWB-40S           | MSVj/3430  | SW-846 5030B |
| J2202333020                           | MWB-21S           | MSVj/3430  | SW-846 5030B |
| J2202333021                           | MWB-20S           | MSVj/3430  | SW-846 5030B |
| J2202333022                           | TRIP BLANK 2      | MSVj/3430  | SW-846 5030B |
| J2202333028                           | SW-5              | MSVj/3430  | SW-846 5030B |
| J2202333029                           | SW-6              | MSVj/3430  | SW-846 5030B |
| J2202333030                           | SW-7              | MSVj/3430  | SW-846 5030B |
| J2202333031                           | SW-4              | MSVj/3430  | SW-846 5030B |
| J2202333032                           | SW-3              | MSVj/3430  | SW-846 5030B |
| J2202333033                           | SW-1              | MSVj/3430  | SW-846 5030B |
| J2202333034                           | Trip Blank 1      | MSVj/3430  | SW-846 5030B |
| J2202333035                           | EQUIPMENT BLANK 2 | MSVj/3430  | SW-846 5030B |
| J2202333036                           | SGMW-1SR          | MSVj/3430  | SW-846 5030B |
| <b>MSVj/3433 - SW-846 8260B (SIM)</b> |                   |            |              |
| J2202333037                           | SGMW-2S           | MSVj/3432  | SW-846 5030B |
| J2202333038                           | MWB-11S           | MSVj/3432  | SW-846 5030B |
| J2202333039                           | TRIP BLANK 3      | MSVj/3432  | SW-846 5030B |
| <b>WCAg/5522 - EPA 350.1</b>          |                   |            |              |
| J2202333001                           | MWB22S            |            |              |
| J2202333002                           | MWB12S            |            |              |
| J2202333003                           | MWB13S            |            |              |
| J2202333004                           | MWB27S            |            |              |
| J2202333005                           | MWB29S            |            |              |
| J2202333007                           | MWB13I            |            |              |







**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Cross Reference**

| Lab ID                          | Sample ID       | Prep Batch | Prep Method |
|---------------------------------|-----------------|------------|-------------|
| <b>WCAg/5524 - EPA 350.1</b>    |                 |            |             |
| J2202333008                     | MWB27I          |            |             |
| J2202333009                     | MWB29I          |            |             |
| J2202333010                     | MWB12I          |            |             |
| J2202333011                     | EQUIPMENT BLANK |            |             |
| <b>WCAg/5586 - SM 5310B</b>     |                 |            |             |
| J2202333028                     | SW-5            |            |             |
| J2202333029                     | SW-6            |            |             |
| J2202333030                     | SW-7            |            |             |
| J2202333031                     | SW-4            |            |             |
| J2202333032                     | SW-3            |            |             |
| J2202333033                     | SW-1            |            |             |
| <b>WCAg/5587 - EPA 410.4</b>    |                 |            |             |
| J2202333028                     | SW-5            |            |             |
| J2202333029                     | SW-6            |            |             |
| J2202333030                     | SW-7            |            |             |
| J2202333031                     | SW-4            |            |             |
| J2202333032                     | SW-3            |            |             |
| J2202333033                     | SW-1            |            |             |
| <b>WCAg/5597 - SM 4500NO3-F</b> |                 |            |             |
| J2202333028                     | SW-5            |            |             |
| J2202333029                     | SW-6            |            |             |
| J2202333030                     | SW-7            |            |             |
| <b>WCAg/5598 - SM 4500NO3-F</b> |                 |            |             |
| J2202333031                     | SW-4            |            |             |
| J2202333032                     | SW-3            |            |             |
| J2202333033                     | SW-1            |            |             |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Cross Reference**

| Lab ID                        | Sample ID         | Prep Batch | Prep Method |
|-------------------------------|-------------------|------------|-------------|
| <b>WCAg/5603 - EPA 350.1</b>  |                   |            |             |
| J2202333012                   | MWB-35S           |            |             |
| J2202333013                   | MWB-3S            |            |             |
| J2202333014                   | MWB-2S            |            |             |
| J2202333015                   | MWB-32S           |            |             |
| J2202333016                   | MWB-33S           |            |             |
| J2202333017                   | MWB-34S           |            |             |
| J2202333018                   | MWB-39S           |            |             |
| J2202333019                   | MWB-40S           |            |             |
| J2202333020                   | MWB-21S           |            |             |
| J2202333021                   | MWB-20S           |            |             |
| J2202333023                   | MWB-2I            |            |             |
| J2202333024                   | MWB-3I            |            |             |
| J2202333025                   | MWB-35I           |            |             |
| J2202333026                   | MWB-32I           |            |             |
| J2202333027                   | MWB-34I           |            |             |
| J2202333028                   | SW-5              |            |             |
| J2202333029                   | SW-6              |            |             |
| J2202333030                   | SW-7              |            |             |
| J2202333031                   | SW-4              |            |             |
| J2202333032                   | SW-3              |            |             |
| J2202333033                   | SW-1              |            |             |
| J2202333035                   | EQUIPMENT BLANK 2 |            |             |
| J2202333036                   | SGMW-1SR          |            |             |
| J2202333037                   | SGMW-2S           |            |             |
| J2202333038                   | MWB-11S           |            |             |
| J2202333040                   | MWB39I            |            |             |
| J2202333041                   | MWB111(R)         |            |             |
| <b>WCAg/5606 - SM 10200 H</b> |                   |            |             |
| J2202333028                   | SW-5              |            |             |
| J2202333029                   | SW-6              |            |             |
| J2202333030                   | SW-7              |            |             |

**Batch Comments**

filters extracted 2/28/22 14:00





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Cross Reference**

| Lab ID                        | Sample ID | Prep Batch | Prep Method |
|-------------------------------|-----------|------------|-------------|
| <b>WCAg/5609 - SM 10200 H</b> |           |            |             |
| J2202333031                   | SW-4      |            |             |
| J2202333032                   | SW-3      |            |             |
| J2202333033                   | SW-1      |            |             |

**Batch Comments**

filters extracted 3/1/22 10:00

| <b>WCAg/5676 - EPA 351.2</b> |      |           |                          |
|------------------------------|------|-----------|--------------------------|
| J2202333028                  | SW-5 | WCAg/5659 | Copper Sulfate Digestion |
| J2202333029                  | SW-6 | WCAg/5659 | Copper Sulfate Digestion |
| J2202333030                  | SW-7 | WCAg/5659 | Copper Sulfate Digestion |
| J2202333031                  | SW-4 | WCAg/5659 | Copper Sulfate Digestion |

| <b>WCAg/5677 - EPA 365.4</b> |      |           |                          |
|------------------------------|------|-----------|--------------------------|
| J2202333028                  | SW-5 | WCAg/5659 | Copper Sulfate Digestion |
| J2202333029                  | SW-6 | WCAg/5659 | Copper Sulfate Digestion |
| J2202333030                  | SW-7 | WCAg/5659 | Copper Sulfate Digestion |
| J2202333031                  | SW-4 | WCAg/5659 | Copper Sulfate Digestion |

| <b>WCAg/5678 - EPA 351.2</b> |      |           |                          |
|------------------------------|------|-----------|--------------------------|
| J2202333032                  | SW-3 | WCAg/5660 | Copper Sulfate Digestion |
| J2202333033                  | SW-1 | WCAg/5660 | Copper Sulfate Digestion |

| <b>WCAg/5679 - EPA 365.4</b> |      |           |                          |
|------------------------------|------|-----------|--------------------------|
| J2202333032                  | SW-3 | WCAg/5660 | Copper Sulfate Digestion |
| J2202333033                  | SW-1 | WCAg/5660 | Copper Sulfate Digestion |

| <b>WCAj/5096 - EPA 300.0</b> |                 |  |  |
|------------------------------|-----------------|--|--|
| J2202333001                  | MWB22S          |  |  |
| J2202333002                  | MWB12S          |  |  |
| J2202333003                  | MWB13S          |  |  |
| J2202333004                  | MWB27S          |  |  |
| J2202333005                  | MWB29S          |  |  |
| J2202333007                  | MWB13I          |  |  |
| J2202333008                  | MWB27I          |  |  |
| J2202333009                  | MWB29I          |  |  |
| J2202333010                  | MWB12I          |  |  |
| J2202333011                  | EQUIPMENT BLANK |  |  |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2202333)

**QC Cross Reference**

| Lab ID                       | Sample ID         | Prep Batch | Prep Method |
|------------------------------|-------------------|------------|-------------|
| <b>WCAj/5111 - EPA 300.0</b> |                   |            |             |
| J2202333012                  | MWB-35S           |            |             |
| J2202333013                  | MWB-3S            |            |             |
| J2202333014                  | MWB-2S            |            |             |
| <b>WCAj/5122 - SM 5210B</b>  |                   |            |             |
| J2202333028                  | SW-5              |            |             |
| J2202333029                  | SW-6              |            |             |
| J2202333030                  | SW-7              |            |             |
| J2202333031                  | SW-4              |            |             |
| J2202333032                  | SW-3              |            |             |
| J2202333033                  | SW-1              |            |             |
| <b>WCAj/5124 - EPA 300.0</b> |                   |            |             |
| J2202333015                  | MWB-32S           |            |             |
| J2202333016                  | MWB-33S           |            |             |
| J2202333017                  | MWB-34S           |            |             |
| J2202333018                  | MWB-39S           |            |             |
| J2202333019                  | MWB-40S           |            |             |
| J2202333020                  | MWB-21S           |            |             |
| J2202333021                  | MWB-20S           |            |             |
| J2202333023                  | MWB-2I            |            |             |
| J2202333024                  | MWB-3I            |            |             |
| J2202333025                  | MWB-35I           |            |             |
| <b>WCAj/5127 - EPA 300.0</b> |                   |            |             |
| J2202333026                  | MWB-32I           |            |             |
| J2202333027                  | MWB-34I           |            |             |
| J2202333032                  | SW-3              |            |             |
| J2202333033                  | SW-1              |            |             |
| J2202333035                  | EQUIPMENT BLANK 2 |            |             |
| J2202333037                  | SGMW-2S           |            |             |
| J2202333038                  | MWB-11S           |            |             |
| J2202333040                  | MWB39I            |            |             |
| J2202333041                  | MWB11(R)          |            |             |





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Workorder: Trail Ridge Landfill (J2202333)

### QC Cross Reference

| Lab ID                       | Sample ID       | Prep Batch | Prep Method |
|------------------------------|-----------------|------------|-------------|
| <b>WCAj/5131 - SM 2540 C</b> |                 |            |             |
| J2202333001                  | MWB22S          |            |             |
| J2202333002                  | MWB12S          |            |             |
| J2202333003                  | MWB13S          |            |             |
| J2202333004                  | MWB27S          |            |             |
| J2202333005                  | MWB29S          |            |             |
| J2202333007                  | MWB13I          |            |             |
| J2202333008                  | MWB27I          |            |             |
| J2202333009                  | MWB29I          |            |             |
| J2202333010                  | MWB12I          |            |             |
| J2202333011                  | EQUIPMENT BLANK |            |             |
| J2202333012                  | MWB-35S         |            |             |
| J2202333014                  | MWB-2S          |            |             |
| J2202333017                  | MWB-34S         |            |             |
| J2202333018                  | MWB-39S         |            |             |
| J2202333021                  | MWB-20S         |            |             |
| J2202333024                  | MWB-3I          |            |             |
| J2202333026                  | MWB-32I         |            |             |
| J2202333036                  | SGMW-1SR        |            |             |
| J2202333038                  | MWB-11S         |            |             |
| J2202333040                  | MWB39I          |            |             |
| <b>WCAj/5132 - EPA 300.0</b> |                 |            |             |
| J2202333028                  | SW-5            |            |             |
| J2202333029                  | SW-6            |            |             |
| J2202333030                  | SW-7            |            |             |
| J2202333031                  | SW-4            |            |             |
| J2202333036                  | SGMW-1SR        |            |             |

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Workorder: Trail Ridge Landfill (J2202333)

### QC Cross Reference

| Lab ID                       | Sample ID         | Prep Batch | Prep Method |
|------------------------------|-------------------|------------|-------------|
| <b>WCAj/5147 - SM 2540 C</b> |                   |            |             |
| J2202333010                  | MWB12I            |            |             |
| J2202333013                  | MWB-3S            |            |             |
| J2202333015                  | MWB-32S           |            |             |
| J2202333016                  | MWB-33S           |            |             |
| J2202333019                  | MWB-40S           |            |             |
| J2202333020                  | MWB-21S           |            |             |
| J2202333023                  | MWB-2I            |            |             |
| J2202333025                  | MWB-35I           |            |             |
| J2202333027                  | MWB-34I           |            |             |
| J2202333035                  | EQUIPMENT BLANK 2 |            |             |
| J2202333037                  | SGMW-2S           |            |             |
| J2202333041                  | MWB11I(R)         |            |             |
| <b>WCAj/5168 - SM 2540D</b>  |                   |            |             |
| J2202333028                  | SW-5              |            |             |
| J2202333029                  | SW-6              |            |             |
| J2202333030                  | SW-7              |            |             |
| J2202333031                  | SW-4              |            |             |
| J2202333032                  | SW-3              |            |             |
| J2202333033                  | SW-1              |            |             |
| <b>WCAj/5170 - SM 2540 C</b> |                   |            |             |
| J2202333028                  | SW-5              |            |             |
| J2202333029                  | SW-6              |            |             |
| J2202333030                  | SW-7              |            |             |
| J2202333031                  | SW-4              |            |             |
| J2202333032                  | SW-3              |            |             |
| J2202333033                  | SW-1              |            |             |

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Workorder: Trail Ridge Landfill (J2202333)



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 528 S. North Lake Blvd., Ste. 1018 - Altamonte Springs, FL 32711 • 407.837.1594 • Fax: 407.837.1597 • E82001

Page 1 of 1 LAB NUMBER:

| <b>CITY OF JACKSONVILLE</b><br>214 North Hogan Street, 10th Floor<br>Jacksonville, FL 32202<br>(904) 255-7513   |                    | <b>Trail Ridge Landfill</b><br>PROJECT NUMBER: 6083724<br>PROJECT LOCATION:        |               | REMAINS/SPECIAL INSTRUCTIONS:<br><b>Ground Water Shallow Wells</b><br>CEC Contact: Jim Christiansen<br><b>33628 TRAIL RIDGE LANDFILL, INC. (ADAPT)</b><br>AEL Jax Profile: 30178, Line 4 |           | BOTTLE SIZE & TYPE:<br>3X40mL VOA vials<br>250mL poly<br>250mL poly<br>1L |                        |
|---|--------------------|--|---------------|--|-----------|---|------------------------|
| CLIENT NAME: CITY OF JACKSONVILLE<br>ADDRESS: 214 North Hogan Street, 10th Floor Jacksonville, FL 32202<br>PHONE: (904) 255-7513<br>FAX:<br>CONTACT: Eric B. Fuller<br>SUPERIOR BY: David Anderson<br>TURN AROUND TIME: <input type="checkbox"/> Rush |                    | PROJECT NAME: Trail Ridge Landfill<br>PROJECT NUMBER: 6083724<br>PROJECT LOCATION: |               | ANALYSIS REQUIRED:<br><b>App I + EDB</b><br><b>8260/8260SIM</b><br><b>App I + Na,Fe,Hg</b><br><b>6010/6020/7470</b><br><b>NO3 / Cl / TDS</b><br><b>Ammonia-N 350.1</b>                   |           | * J 2 2 0 2 3 3 3 *   |                        |
| SAMPLE ID   | SAMPLE DESCRIPTION | Grab Comp  | SAMPLING DATE | MATRIX   | NO. CONT. | PRESERVATION  | LABORATORY I.D. NUMBER |
|   | MWB225             | G  | 2-18 0810     | GW   | 6         |   | 001                    |
|   | MWB125             | G  | 2-18 0939     | GW   | 6         |   | 002                    |
|   | MWB135             | G  | 2-18 0838     | GW   | 6         |   | 003                    |
|   | MWB225             | G  | 2-18 1003     | GW   | 6         |   | 004                    |
|   | MWB295             | G  | 2-18 1059     | GW   | 6         |   | 005                    |
|   | TRIP               | G  | 2-18 -        | GW   | 3         |   | 000                    |

Matrix Code: WY = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Received on ice:  Yes  No Temp taken from sample:  Temp from temp blank

From received 2/8/22

Relinquished by: [Signature] Date: 2/8/22 Time: 11:10

Received by: [Signature] Date: 2/8/22 Time: 11:40

Device used for measuring Temp by: Unique Identifier: (Circle RI Temp unit used) G: 17.1 LT: 2 T: 10A A: 3A


Temperature when received: 40 (in degrees celsius)

FOR DRINKING WATER USE:  
 (When PWS information not otherwise supplied) PWS ID: \_\_\_\_\_  
 Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Supplier of Water: \_\_\_\_\_  
 Site Address: \_\_\_\_\_



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Workorder: Trail Ridge Landfill (J2202333)



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|  |  |  |  |
|--|--|--|--|
| CLIENT NAME<br><b>CITY OF JACKSONVILLE</b>   |  | PROJECT NAME<br><b>Trail Ridge Landfill</b>  |  |
| ADDRESS<br>214 North Hogan Street, 10th Floor<br>Jacksonville, FL 32202                        |  | PROJECT LOCATION<br>33628 TRAIL RIDGE LANDFILL, INC. (ADAPT)<br>AEL Jax Profile: 30178, Line 4 |  |
| PHONE<br>(904) 255-7513  | PROJECT NUMBER<br>508372.4   |  |  |
| FAX  | REMARKS/SPECIAL INSTRUCTIONS<br>Ground Water Intermediate Wells<br>CEC Contact: Jim Christiansen |  |  |
| CONTACT<br>Eric B. Fuller  | ANALYSIS REQUIRED  |  |  |
| SAMPLED BY<br>Dorian Arnsperg  | BOTTLE SIZE & TYPE   |  |  |
| TURN AROUND TIME<br><input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH | Fe, Na by 6010 250mL poly  |  |  |
|  | NO3 / Cl / TDS 250mL poly  |  |  |
|  | Ammonia-N 350.1 125mL poly   |  |  |
|  | LABORATORY I.D. NUMBER   |  |  |

| SAMPLE ID       | SAMPLE DESCRIPTION | GRID COMP | SAMPLING |      | MATRIX | NO. COUNT | PRESERVATION | H2O2 | NO2 | H2SO4 |
|-----------------|--------------------|-----------|----------|------|--------|-----------|--------------|------|-----|-------|
|                 |                    |           | DATE     | TIME |        |           |              |      |     |       |
| MUB13I          |                    | 4         | 2-18     | 0704 | GW     | 3         |              |      |     |       |
| MUB22I          |                    | 4         | 2-18     | 0936 | GW     | 3         |              |      |     |       |
| MUB29I          |                    | 6         | 2-18     | 1531 | GW     | 3         |              |      |     |       |
| MUB12I          |                    | 4         | 2-18     | 0711 | GW     | 3         |              |      |     |       |
| EQUIPMENT BLANK |                    | 6         | 2-18     | 1105 | GW     | 3         |              |      |     |       |

Matrix Code: WY = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Received on for  Yes  No  Temp taken from sample  Temp from temp blank  Where required, pH checked

Form revised 2/16/05

Requisitioned by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Device used for measuring Temp by unique identifier (circle ID temp part used)

FOR DRINKING WATER USE:  
 (When this information on invoice is supplied) PWS ID: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Supplier of Water: \_\_\_\_\_  
 Site Address: \_\_\_\_\_

Preservation Code: 1 = Ice (H+VCO) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)  
 Temperature when received: 40 (in degrees Celsius)







**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SW-846 8260B  
Preparation: SW-846 5030B

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: The matrix spike (MS) recovery of Vinyl Chloride for J2202333012 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.  
Internal Standard: All acceptance criteria were met.  
Samples: All acceptance criteria were met.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: EPA 300.0  
Preparation:

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: The matrix spike (MS) recovery of Nitrate for J2202363001 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.  
Internal Standard: All acceptance criteria were met.  
Samples: J2202333001 and J2202333003 were analyzed at dilution due to high conductivity levels. The lowest possible dilution was performed to allow the analyte value to be within the calibration curve's highest level and to prevent possible damage to the analytical column.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: The analysis of J2202333010 was initially performed within the holding time. Reanalysis was required and was performed past the recommended holding time. The report includes the results from the second analysis and the results have been qualified accordingly.

**III. Method**

Analysis: SM 2540 C  
Preparation:

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: All acceptance criteria were met.  
Internal Standard: All acceptance criteria were met.  
Samples: All acceptance criteria were met.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### I. Receipt

No Exceptions were encountered.

#### II. Holding Times

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### III. Method

Analysis: SW-846 8260B (SIM)  
Preparation: SW-846 5030B

#### IV. Preparation

Sample preparation proceeded normally.

#### V. Analysis

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.

Spikes The spike recovery of 1,2-Dibromo-3-Chloropropane for the Laboratory Control Sample (LCS) was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

The relative percent difference (RPD) for 1,2-Dibromo-3-Chloropropane between the Laboratory Control Sample (LCS) and the Laboratory Control Sample Duplicate (LCSD) was outside control criteria due to relatively higher spike recovery in 4217205LCS in comparison with 4217206LCSD. Spike recoveries in the LCS failed high with non detects and LCSD was within acceptable limits, indicating the analytical batch was in control. No further corrective action was required.

Internal Standard: All acceptance criteria were met.  
Samples: All acceptance criteria were met.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.



Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### I. Receipt

No Exceptions were encountered.

#### II. Holding Times

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### III. Method

Analysis: EPA 351.2  
Preparation: Copper Sulfate Digestion

#### IV. Preparation

Sample preparation proceeded normally.

#### V. Analysis

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: All acceptance criteria were met.  
Internal Standard: All acceptance criteria were met.  
Samples: All acceptance criteria were met.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: The relative percent difference (RPD) for the following analyte(s) in the replicate matrix spike analyses of J2202333031 was outside control criteria: TKN. Failing RPD indicates inconsistency in the parent sample matrix. All spike recoveries in the MS, MSD and associated LCS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: EPA 300.0  
Preparation: EPA 300.0

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: All acceptance criteria were met.  
Internal Standard: All acceptance criteria were met.  
Samples: J2202410002 and J2202333032 were analyzed at dilution due to high conductivity levels. The lowest possible dilution was performed to allow the analyte value to be within the calibration curve's highest level and to prevent possible damage to the analytical column.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SW-846 6010  
Preparation: SW-846 3010A

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: The control criteria for matrix spike recoveries of Calcium for J2202333031 are not applicable. The analyte concentration in the sample was greater than 4 times the added spike concentrations, preventing accurate evaluation of the spike recovery. No further corrective action was required.  
Internal Standard: All acceptance criteria were met.  
Samples: All acceptance criteria were met.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.





**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### I. Receipt

No Exceptions were encountered.

#### II. Holding Times

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### III. Method

Analysis: SW-846 8260B  
Preparation: SW-846 5030B

#### IV. Preparation

Sample preparation proceeded normally.

#### V. Analysis

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: The matrix spike (MS) recovery of Vinyl Chloride for J2202333036 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.  
Internal Standard: All acceptance criteria were met.  
Samples: Sample J2202256008 was analyzed at the lowest possible dilution due to a non-water miscible sample matrix that required mid-level Methanol extraction.  
J2202256008 required an additional dilution due to the presence of a foamy sample matrix (surfactants). The dilution was necessary to prevent foam over during the purge cycle, resulting in instrument damage.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: EPA 300.0  
Preparation:

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: The matrix spike (MS) recovery of Chloride for J2202333036 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.  
Internal Standard: All acceptance criteria were met.  
Samples: J2202476001, J2202477001, J2202478001, J2202519004 were analyzed at dilution due to high conductivity levels. The lowest possible dilution was performed to allow the analyte value to be within the calibration curve's highest level and to prevent possible damage to the analytical column.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### I. Receipt

No Exceptions were encountered.

#### II. Holding Times

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### III. Method

Analysis: EPA 300.0  
Preparation:

#### IV. Preparation

Sample preparation proceeded normally.

#### V. Analysis

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: The spike recovery of Fluoride for the Laboratory Control Sample Duplicate (LCSD) was outside the upper control criterion. The analyte in question was not detected in the associated client sample; J2202406001. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.  
Internal Standard: All acceptance criteria were met.  
Samples: J2202406001, J2202409002, j2202411001, and J2202415001 were analyzed at dilution due to high conductivity levels. The lowest possible dilution was performed to allow the analyte value to be within the calibration curve's highest level and to prevent possible damage to the analytical column.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### I. Receipt

No Exceptions were encountered.

#### II. Holding Times

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### III. Method

Analysis: EPA 300.0  
Preparation:

#### IV. Preparation

Sample preparation proceeded normally.

#### V. Analysis

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: The matrix spike (MS) recovery of Nitrate for J2202333016 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.  
Internal Standard: All acceptance criteria were met.  
Samples: J2202333017, -018, and -020 was analyzed at dilution due to high conductivity levels. The lowest possible dilution was performed to allow the analyte value to be within the calibration curve's highest level and to prevent possible damage to the analytical column.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### I. Receipt

No Exceptions were encountered.

#### II. Holding Times

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### III. Method

Analysis: SW-846 8260B (SIM)  
Preparation: SW-846 5030B

#### IV. Preparation

Sample preparation proceeded normally.

#### V. Analysis

Calibration: The upper control criterion was exceeded for 1,2-Dibromo-3-Chloropropane in Continuing Calibration Verification (CCV) standards for analytical batch 3431 (J2202333028 and J2202333029), indicating increased sensitivity. The client samples reported in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes The spike recovery of 1,2-Dibromo-3-Chloropropane for the Laboratory Control Sample (LCS) was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

The relative percent difference (RPD) for 1,2-Dibromo-3-Chloropropane between the Laboratory Control Sample (LCS) and the Laboratory Control Sample Duplicate (LCSD) was outside control criteria due to relatively higher spike recovery in 4217188LCS in comparison with 4217189LCSD. Spike recoveries in the LCS failed high with non detects and LCSD was within acceptable limits, indicating the analytical batch was in control. No further corrective action was required.

Internal Standard: All acceptance criteria were met.



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Samples: All acceptance criteria were met.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### I. Receipt

No Exceptions were encountered.

#### II. Holding Times

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### III. Method

Analysis: SW-846 8260B (SIM)  
Preparation: SW-846 5030B

#### IV. Preparation

Sample preparation proceeded normally.

#### V. Analysis

Calibration: The upper control criterion was exceeded for 1,2-Dibromo-3-Chloropropane in Continuing Calibration Verification (CCV) standard for analytical batch 6698, indicating increased sensitivity. The client samples reported in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes: The spike recovery of 1,2-Dibromo-3-Chloropropane for the Laboratory Control Sample (LCS) was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

Internal Standard: All acceptance criteria were met.

Samples: All acceptance criteria were met.

Other: All acceptance criteria were met.

Serial Dilution: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SM 2540 C  
Preparation:

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: All acceptance criteria were met.  
Internal Standard: All acceptance criteria were met.  
Samples: All acceptance criteria were met.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: The relative percent difference (RPD) for the following analyte in the replicate sample duplicate analyses of J2202333028 was outside control criteria: TSS. Failing RPD indicates inconsistency in the parent sample matrix. The LCS was within acceptable limits, indicating the analytical batch was in control. The data were qualified accordingly.





**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

### I. Receipt

No Exceptions were encountered.

### II. Holding Times

**Preparation:** All holding times were met.  
**Analysis:** The analysis of J2202454 was initially performed past the recommended holding time. An internal laboratory failure occurred which resulted in the missed holding time. Efforts were made to analyze the sample as soon as the error was identified. The data is qualified to indicate the holding time violation.

### III. Method

**Analysis:** SM 5210B  
**Preparation:**

### IV. Preparation

Sample preparation proceeded normally.

### V. Analysis

**Calibration:** All acceptance criteria were met.  
**Blanks:** Method Blank (MB) contained a low level of BOD above the Standard Method 5210 limit of 0.2mg/L, but below the laboratory Method Detection Limit (MDL). The slight positive bias implied by the elevated MB result was deemed insignificant. There were no adverse effects on the data.  
**Surrogates:** All acceptance criteria were met.  
**Spikes** The spike recovery of BOD for the Laboratory Control Sample (LCS) was outside the lower control criterion. The error associated with the recovery equates to a low bias. There was insufficient sample remaining to reextract or reanalyze. All batch samples were qualified accordingly.  
**Internal Standard:** All acceptance criteria were met.  
**Samples:**



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The relative percent difference (RPD) for the following analyte in the duplicate sample analyses of J2202454001, J2202454002, J2202454004, J2202453002, J2202517001, J2202517002, and J2202519001 was outside control criteria: BOD. Failing RPD indicates inconsistency in the parent sample matrix. No further corrective action was needed.

The results from the dilution series for sample J2202333028, J2202333029, J2202333030, J2202333031, J2202333032, and J2202333033 did not meet the dissolved oxygen (DO) uptake requirement of 2mg/L after the 5-day incubation period for analyte [CBOD/BOD]. Results have been qualified and should be considered estimated.

Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### I. Receipt

No Exceptions were encountered.

#### II. Holding Times

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### III. Method

Analysis: EPA 365.4  
Preparation: Copper Sulfate Digestion

#### IV. Preparation

Sample preparation proceeded normally.

#### V. Analysis

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: The matrix spike recoveries of TP for A2201875005 were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The affected sample is qualified to indicate matrix interference.  
Internal Standard: All acceptance criteria were met.  
Samples: All acceptance criteria were met.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: The relative percent difference (RPD) for the following analyte(s) in the replicate matrix spike analyses of J2202333031 was outside control criteria: TP. Failing RPD indicates inconsistency in the parent sample matrix. All spike recoveries in the MS, MSD and associated LCS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.



**Work Order:** J2202333  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### I. Receipt

No Exceptions were encountered.

#### II. Holding Times

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### III. Method

Analysis: SM 2540D  
Preparation:

#### IV. Preparation

Sample preparation proceeded normally.

#### V. Analysis

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: All acceptance criteria were met.  
Internal Standard: All acceptance criteria were met.  
Samples: All acceptance criteria were met.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: The relative percent difference (RPD) for the following analyte in the replicate sample duplicate analyses of J2202333032 was outside control criteria: TSS. Failing RPD indicates inconsistency in the parent sample matrix. The LCS was within acceptable limits, indicating the analytical batch was in control. The data were qualified accordingly.



Advanced Environmental Laboratories, Inc  
6681 Southpoint Pkwy Jacksonville, FL 32216  
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Phone: (904) 363-9350  
Fax: (904) 363-9354

**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

April 04, 2022

Eric B. Fuller  
City of Jacksonville  
214 North Hogan Street  
10th Floor  
Jacksonville, FL 32202

RE: Workorder: J2203966 Trail Ridge Landfill

Dear Eric B. Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday March 24, 2022. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jerry Allen  
JAllen@aellab.com

**Certificate of Analysis**

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

## Sample Summary

| Lab ID      | Sample ID | Matrix | Method       | Date Collected   | Date Received    | Analytes Reported |
|-------------|-----------|--------|--------------|------------------|------------------|-------------------|
| J2203966001 | MWB-39S   | WA     | EPA 300.0    | 03/24/2022 09:02 | 03/24/2022 09:45 | 1                 |
| J2203966001 | MWB-39S   | WA     | RSK-175      | 03/24/2022 09:02 | 03/24/2022 09:45 | 1                 |
| J2203966001 | MWB-39S   | WA     | SW-846 8260B | 03/24/2022 09:02 | 03/24/2022 09:45 | 1                 |
| J2203966002 | MWB-12S   | WA     | SW-846 6020  | 03/24/2022 08:28 | 03/24/2022 09:45 | 1                 |
| J2203966003 | MWB-13S   | WA     | SW-846 6020  | 03/24/2022 07:55 | 03/24/2022 09:45 | 1                 |
| J2203966004 | MWB-11IR  | WA     | SW-846 6010  | 03/24/2022 07:23 | 03/24/2022 09:45 | 1                 |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

## Analytical Results Qualifiers

### Parameter Qualifiers

- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J4 Estimated Result

### Lab Qualifiers

- J DOH Certification #E82574 (FL NELAC) AEL-Jacksonville

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**Analytical Results**

|                            |   |                      |
|----------------------------|---|----------------------|
| <b>Lab ID:</b> J2203966001 | <b>Date Collected:</b> 03/24/2022 09:02 | <b>Matrix:</b> Water |
| <b>Sample ID:</b> MWB-39S  | <b>Date Received:</b> 03/24/2022 09:45  |                      |

| Parameter                                    | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|-----|------|----|------------------|------------------|-----|
| <b>VOLATILES (RSK-175 )</b>                  |         |       |     |      |    |                  |                  |     |
| Methane                                      | 285     | ug/L  | 22  | 3.6  | 10 | 03/25/2022 14:30 | 03/25/2022 14:30 | J   |
| <b>VOLATILES (SW-846 5030B/SW-846 8260B)</b> |         |       |     |      |    |                  |                  |     |
| Benzene                                      | 1.3     | ug/L  | 1.0 | 0.25 | 1  | 03/25/2022 08:58 | 03/25/2022 13:51 | J   |
| <b>WET CHEMISTRY (EPA 300.0)</b>             |         |       |     |      |    |                  |                  |     |
| Chloride                                     | 230     | mg/L  | 16  | 4.0  | 2  | 03/25/2022 03:10 | 03/25/2022 03:10 | J   |

**Analysis Results Comments**

**Methane**

J4|Estimated Result

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       | J   |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 103            | 77 - 119       | J   |
| Bromofluorobenzene (S)    | ug/L  | 50            | 60           | 120            | 86 - 123       | J   |

**Certificate of Analysis**

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**Analytical Results**

**Lab ID:** J2203966002      **Date Collected:** 03/24/2022 08:28      **Matrix:** Water  
**Sample ID:** MWB-12S      **Date Received:** 03/24/2022 09:45

| Parameter                                | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|-----|------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6020)</b> |         |       |     |      |    |                  |                  |     |
| Arsenic                                  | 0.49 I  | ug/L  | 1.0 | 0.25 | 1  | 04/01/2022 08:30 | 04/01/2022 19:50 | J   |





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 Phone: (904) 363-9350  
 Fax: (904) 363-9354

**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**Analytical Results**

**Lab ID:** J2203966003      **Date Collected:** 03/24/2022 07:55      **Matrix:** Water  
**Sample ID:** MWB-13S      **Date Received:** 03/24/2022 09:45

| Parameter                                | Results | Units | PQL | MDL  | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|-----|------|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6020)</b> |         |       |     |      |    |                  |                  |     |
| Chromium                                 | 11      | ug/L  | 2.0 | 0.50 | 1  | 03/25/2022 08:00 | 03/30/2022 12:38 | J   |





Advanced Environmental Laboratories, Inc  
 6681 Southpoint Pkwy Jacksonville, FL 32216  
 Payments: P.O. Box 551580 Jacksonville, FL 32255-1580  
 Phone: (904) 363-9350  
 Fax: (904) 363-9354

**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**Analytical Results**

**Lab ID:** J2203966004      **Date Collected:** 03/24/2022 07:23      **Matrix:** Water  
**Sample ID:** MWB-111R      **Date Received:** 03/24/2022 09:45

| Parameter                                | Results | Units | PQL | MDL | DF | Prepared         | Analyzed         | Lab |
|--|---------|-------|-----|-----|----|------------------|------------------|-----|
| <b>METALS (SW-846 3010A/SW-846 6010)</b> |         |       |     |     |    |                  |                  |     |
| Iron                                     | 730 I   | ug/L  | 800 | 200 | 1  | 03/25/2022 09:53 | 03/25/2022 21:57 | J   |





**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**QC Results**

**QC Batch:** GCVj/1289  
**Preparation Method:** RSK-175  
**Associated Lab IDs:** J2203966001

**Analysis Method:** RSK-175

**Method Blank(4253243)**

| Parameter | Results | Units | PQL | MDL  | Lab |
|-----------|---------|-------|-----|------|-----|
| Methane   | 0.36 U  | ug/L  | 2.2 | 0.36 | J   |

**Lab Control Sample (4253244); Lab Control Sample Duplicate (4253245)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Methane   | ug/L  | 17.90         | 18.6         | 104            | 80 - 120       | 18         | 100          | 3   | 25        | J   |

**Matrix Spike (4253246); Matrix Spike Duplicate (4253247); Parent Lab Sample (J2203966001)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Methane   | ug/L  | 17.90         | 299          | 75             | 80 - 120       | 281        | -25          | 6   | 25        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**QC Results**

**QC Batch:** ICMj/1837  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2203966003

**Analysis Method:** SW-846 6020

**Method Blank(4253093)**

| Parameter | Results | Units | PQL | MDL  | Lab |
|-----------|---------|-------|-----|------|-----|
| Chromium  | 0.50 U  | ug/L  | 2.0 | 0.50 | J   |

**Lab Control Sample (4253094)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Chromium  | ug/L  | 20            | 20           | 100            | 80 - 120       | J   |

**Matrix Spike (4253095); Matrix Spike Duplicate (4253096); Parent Lab Sample (J2203966003)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chromium  | ug/L  | 20            | 28           | 82             | 75 - 125       | 29         | 90           | 5   | 20        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**QC Results**

**QC Batch:** ICMj/1857  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2203966002

**Analysis Method:** SW-846 6020

**Method Blank(4260253)**

| Parameter | Results | Units | PQL | MDL  | Lab |
|-----------|---------|-------|-----|------|-----|
| Arsenic   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |

**Lab Control Sample (4260254)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Arsenic   | ug/L  | 20            | 20           | 99             | 80 - 120       | J   |

**Matrix Spike (4260255); Matrix Spike Duplicate (4260256); Parent Lab Sample (T2206271003)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Arsenic   | ug/L  | 20            | 19           | 92             | 75 - 125       | 20         | 93           | 1   | 20        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**QC Results**

**QC Batch:** ICPj/1802  
**Preparation Method:** SW-846 3010A  
**Associated Lab IDs:** J2203966004

**Analysis Method:** SW-846 6010

**Method Blank(4252844)**

| Parameter | Results | Units | PQL | MDL | Lab |
|-----------|---------|-------|-----|-----|-----|
| Iron      | 200 U   | ug/L  | 800 | 200 | J   |

**Lab Control Sample (4252845)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Iron      | ug/L  | 4000          | 4000         | 100            | 80 - 120       | J   |

**Matrix Spike (4252846); Matrix Spike Duplicate (4252847); Parent Lab Sample (J2203831001)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Iron      | ug/L  | 4000          | 3800         | 95             | 75 - 125       | 3900       | 98           | 2   | 20        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**QC Results**

**QC Batch:** MSVJ/3645  
**Preparation Method:** SW-846 5030B  
**Associated Lab IDs:** J2203966001

**Analysis Method:** SW-846 8260B

**Method Blank(4252794)**

| Parameter | Results | Units | PQL | MDL  | Lab |
|-----------|---------|-------|-----|------|-----|
| Benzene   | 0.25 U  | ug/L  | 1.0 | 0.25 | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 53           | 106            | 70 - 128       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 60           | 120            | 86 - 123       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 105            | 77 - 119       |     |

**Lab Control Sample (4252795); Lab Control Sample Duplicate (4252796)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Benzene   | ug/L  | 20            | 20           | 102            | 70 - 130       | 23         | 114          | 11  | 20        | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 50           | 99             | 70 - 128       | 50         | 99           | 0   |           |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 52           | 103            | 86 - 123       | 52         | 105          | 2   |           |     |
| Toluene-d8 (S)            | ug/L  | 50            | 51           | 101            | 77 - 119       | 50         | 101          | 1   |           |     |

**Matrix Spike (4252797); Parent Lab Sample (J2203931019)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|-----|
| Benzene   | ug/L  | 20            | 22           | 111            | 70 - 130       | J   |

**Surrogates**

| Parameter                 | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Lab |
|---------------------------|-------|---------------|--------------|----------------|----------------|-----|
| 1,2-Dichloroethane-d4 (S) | ug/L  | 50            | 52           | 105            | 70 - 128       |     |
| Bromofluorobenzene (S)    | ug/L  | 50            | 53           | 105            | 86 - 123       |     |
| Toluene-d8 (S)            | ug/L  | 50            | 52           | 104            | 77 - 119       |     |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**QC Results**

**QC Batch:** WCAj/5406  
**Preparation Method:** EPA 300.0  
**Associated Lab IDs:** J2203966001

**Analysis Method:** EPA 300.0

**Method Blank(4253208)**

| Parameter | Results | Units | PQL | MDL | Lab |
|-----------|---------|-------|-----|-----|-----|
| Chloride  | 2.0 U   | mg/L  | 8.0 | 2.0 | J   |

**Lab Control Sample (4253209); Lab Control Sample Duplicate (4253210)**

| Parameter | Units | Spiked Amount | Spike Result | Spike Recovery | Control Limits | Dup Result | Dup Recovery | RPD | RPD Limit | Lab |
|-----------|-------|---------------|--------------|----------------|----------------|------------|--------------|-----|-----------|-----|
| Chloride  | mg/L  | 20            | 21           | 103            | 90 - 110       | 21         | 103          | 0   | 10        | J   |

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**FINAL**

**Workorder:** Trail Ridge Landfill (J2203966)

**QC Cross Reference**

| Lab ID                          | Sample ID | Prep Batch | Prep Method  |
|---------------------------------|-----------|------------|--------------|
| <b>GCVj/1289 - RSK-175</b>      |           |            |              |
| J2203966001                     | MWB-39S   |            |              |
| <b>ICMj/1837 - SW-846 6020</b>  |           |            |              |
| J2203966003                     | MWB-13S   | DGMj/3025  | SW-846 3010A |
| <b>ICMj/1857 - SW-846 6020</b>  |           |            |              |
| J2203966002                     | MWB-12S   | DGMj/3066  | SW-846 3010A |
| <b>ICPj/1802 - SW-846 6010</b>  |           |            |              |
| J2203966004                     | MWB-111R  | DGMj/3020  | SW-846 3010A |
| <b>MSVj/3645 - SW-846 8260B</b> |           |            |              |
| J2203966001                     | MWB-39S   | MSVj/3643  | SW-846 5030B |
| <b>WCAj/5406 - EPA 300.0</b>    |           |            |              |
| J2203966001                     | MWB-39S   |            |              |





Advanced Environmental Laboratories, Inc  
 6681 Southpoint Pkwy Jacksonville, FL 32216  
 Payments: P.O. Box 551580 Jacksonville, FL 32255-1580  
 Phone: (904) 363-9350  
 Fax: (904) 363-9354

FINAL

Workorder: Trail Ridge Landfill (J2203966)



**CITY OF JACKSONVILLE**  
 214 North Hogan Street, 10th Floor  
 Jacksonville, FL 32202  
 (904) 255-7513

PROJECT NAME: **Trail Ridge Landfill**  
 PROJECT LOCATION: 608372-4  
 REMAINS SPECIAL INSTRUCTIONS:  
**Ground Water Shallow Wells**  
 CEC Contact: Jim Christiansen

CLIENT NAME: CITY OF JACKSONVILLE  
 ADDRESS: 214 North Hogan Street, 10th Floor  
 JACKSONVILLE, FL 32202  
 PHONE: (904) 255-7513  
 CONTACT: Eric B. Fuller  
 SAMPLED BY: *Danny Arroyo*  
 TIME AROUND TIME:  STANDARD  RUSH

6601 Southpoint Pkwy • Jacksonville, FL 32216 • 904 363 9350 • Fax 904 363 9354 • E82574  
 9610 Process Palm Ave • Tampa, FL 33619 • 813 630 0610 • Fax 813 630 4327 • E89469  
 6015 SW Archer Road • Gainesville, FL 32608 • 352 377 2340 • Fax 352 365 6699 • E82001  
 528 S North Lake Blvd. Ste. 1010 • Altamonte Springs, FL 32701 • 407 577 1504 • Fax 407 577 1597 • E83076

| SAMPLE ID | SAMPLE DESCRIPTION | Grab Comp | SAMPLING |      | MATRIX | NO. COUNT | PRESERVATION | ANALYSIS REQUIRED |     |      |       |       |       |   |  |  |  |
|-----------|--------------------|-----------|----------|------|--------|-----------|--------------|-------------------|-----|------|-------|-------|-------|---|--|--|--|
|           |                    |           | DATE     | TIME |        |           |              | HCl               | HCl | None | HClO3 | HClO3 | HClO3 |   |  |  |  |
| MWB-39S   | Water              | Grab      | 3-19     | 0902 | Water  | 7         |              | X                 | X   | X    |       |       |       |   |  |  |  |
| MWB-12S   | Water              | Grab      | 3-24     | 0828 | Water  | 1         |              |                   |     |      | X     |       |       |   |  |  |  |
| MWB-13S   | Water              | Grab      | 3-24     | 0755 | Water  | 1         |              |                   |     |      |       | X     |       |   |  |  |  |
| MWB-111R  | Water              | Grab      | 3-21     | 0723 | Water  | 1         |              |                   |     |      |       |       |       | X |  |  |  |

LABORATORY I.D. NUMBER: *001, 002, 003, 004*

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge  
 Received on ice:  Yes  No Temp taken from sample:  Temp from Temp blank  Where required, pH checked   
 Form revised 2/8/07

FOR DRINKING WATER USE:  
 (When PWS information not otherwise supplied) PWS ID: \_\_\_\_\_  
 Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Supplier of Water: \_\_\_\_\_  
 Site Address: \_\_\_\_\_

Temperature when received: *7.0* (in degrees Celsius)  
 Preservation Code: 1 = Ice HighDil S = H2SO4 N = (NH4OH) T = (Sodium Thiosulfate)  
 (When PWS information not otherwise supplied) G = ET-1 LT-2 T-10A A-3A

Received by: *S. Arroyo* Date: *3/21/22*  
 Date: *3/21/22* Time: *0745*

Page 1 of 1

\* J 2 2 0 3 9 6 6 \*



**Work Order:** J2203966  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

#### **I. Receipt**

No Exceptions were encountered.

#### **II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

#### **III. Method**

Analysis: EPA 300.0  
Preparation:

#### **IV. Preparation**

Sample preparation proceeded normally.

#### **V. Analysis**

Calibration: All acceptance criteria were met.  
Blanks: All acceptance criteria were met.  
Surrogates: All acceptance criteria were met.  
Spikes: All acceptance criteria were met.  
Internal Standard: All acceptance criteria were met.  
Samples: J2203910001, J2203935001, J2203955001, -002, J2203966001, and J2203953002 were analyzed at dilution due to high conductivity levels. The lowest possible dilution was performed to allow the analyte value to be within the calibration curve's highest level and to prevent possible damage to the analytical column.  
Other: All acceptance criteria were met.  
Serial Dilution: All acceptance criteria were met.  
Duplicates: All acceptance criteria were met.



**Work Order:** J2203966  
**Client:** City of Jacksonville  
**Project ID:** Trail Ridge Landfill

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation:

Analysis: All holding times were met.

**III. Method**

Analysis: RSK-175

Preparation:

**IV. Preparation**

**V. Analysis**

Calibration: All acceptance criteria were met.

Blanks: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Spikes The results for methane have been estimated in the matrix spike and matrix spike duplicate for J2203966001 because the concentration exceeded the instrument calibration range. The results were reported within the instrument calibration range in the parent sample. The results in the Matrix QC are qualified accordingly.

Internal Standard: All acceptance criteria were met.

Samples: J2203966001 and J2203888029 were analyzed at dilution due to high methane levels. The lowest possible dilution was performed to allow the analyte value to be within the calibration curve's highest level and to prevent possible carry over in the following sample analyses.

Other: All acceptance criteria were met.

Serial Dilution: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Atlantic Coast Consulting, Inc.  
 1150 Northmeadow Parkway, Ste 100  
 Roswell, Georgia 30076  
 (770) 715-8090

DEPTH TO WATER MEASUREMENTS

FACILITY: TRAIL RIDGE

DATE: 2-18-22

|            |       |
|------------|-------|
| mWB-27S    | 8.78  |
| mWB-27I    | 10.72 |
| mWB-27D    | 11.07 |
| mWB-29S    | 8.78  |
| mWB-29I    | 10.44 |
| mWB-29D    | 10.55 |
| mWB-3S     | 9.28  |
| mWB-3I     | 15.84 |
| mWB-11S    | 11.85 |
| mWB-11I(R) | 16.24 |
| mWB-13S    | 12.69 |
| mWB-13I    | 18.79 |
| mWB-12S    | 11.24 |
| mWB-12I    | 10.67 |
| mWB-12D    | 8.46  |
| mWB-22S    | 12.59 |
| mWB-20S    | 10.10 |
| mWB-2S     | 10.66 |
| mWB-2I     | 13.50 |

|         |                                       |
|---------|---------------------------------------|
| mWB-33S | 10.84                                 |
| mWB-34S | 9.72                                  |
| mWB-34I | 11.14                                 |
| mWB-34D | 11.32                                 |
| mWB-21S | 11.38                                 |
| mWB-14S | NA. W L IS<br>BELOW<br>DEDICATED PUMP |
| mWB-14I | 12.42                                 |
| mWB-14D | 12.44                                 |
| mWB-24S | 7.96                                  |
| mWB-25S | 9.27                                  |
| mWB-25I | 8.91                                  |
| mWB-25D | 9.51                                  |
| mWB-32S | 9.48                                  |
| mWB-32I | 10.56                                 |
| mWB-32D | 10.72                                 |
| mWB-26S | 8.73                                  |
| mWB-28S | 8.57                                  |
| mWB-30S | 10.16                                 |
| mWB-31D | 20.63                                 |





# WELL CONDITION INSPECTION FORM

Site: TRAIL RIDGE Personnel: DANNY ARMOUR

Date: 2-18-22 Page 1 of 3

| Well ID | Protective Casing   | Well Casing   | Label  | Lock  | Sample Equipment Type  | General Turbidity   | Well Yield   | Comments/Observations * |
|---------|---|---|--|---|------------------------|---|--|-------------------------|
| MWB-3S  | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | DEDICATED BLADDER PUMP | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MWB-20S | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MWB-11S | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MWB-13S | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MWB-22S | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MWB-12S | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MWB-29S | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MWB-27S | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MWB-12F | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |
| MWB-13I | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | "                      | <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Inadequate |                         |

\* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items. Return this form to Site Manager - FOR INTERNAL USE ONLY.





# WELL CONDITION INSPECTION FORM

Site: TRAIL RIDGE Personnel: DANNY ARMOUR

Date: 2-18-22 Page 2 of 3

| Well ID   | Protective Casing  | Well Casing  | Label   | Lock   | Sample Equipment Type        | General Turbidity  | Well Yield  | Comments/Observations * |
|-----------|--|--|---|--|------------------------------|--|---|-------------------------|
| MWB-11(R) | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | DEDICATED<br>PLASTER<br>PUMP | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-3I    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-27I   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-29I   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-27I   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-34I   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-21S   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-32I   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-33S   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-34S   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |

\* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.  
Return this form to Site Manager - FOR INTERNAL USE ONLY.



# WELL CONDITION INSPECTION FORM

Site: TRAIL RIDGE Personnel: DANNY ARMOUR

Date: 2-18-22 Page 3 of 3

| Well ID    | Protective Casing  | Well Casing  | Label   | Lock   | Sample Equipment Type        | General Turbidity  | Well Yield  | Comments/Observations * |
|------------|--|--|---|--|------------------------------|--|---|-------------------------|
| MWB-32S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | DEDICATED<br>BLADDER<br>PUMP | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-2S     | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-35S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | PERISTALTIC<br>PUMP          | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-39S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-39I    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-40S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| MWB-35I    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| S6mw-1S(R) | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |
| S6mw-2S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                         |

\* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items. Return this form to Site Manager - FOR INTERNAL USE ONLY.



# Daily Instrument Calibration Log

SITE: TRAIL RIDGE  
TECHNICIAN: DANNY ARMOUR

WATER LEVEL: SOLINST  
WATER LEVEL S/N: 377053

INSTRUMENT S/N: JYDPKR25  
INSTRUMENT TYPE: HORRIBA  
CAL. SOLUTIONS: ID: Auto LOT #: 20440203 EXP. DATE: FEB 2022  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_

Calibration Date: 2-18-22  
RDO: 100% sat. = 100%  
PH: 4.00 = Auto 7.00 = Auto 10.00 = Auto  
CONDUCTIVITY: 4.49 (std) = 4.53  
ORP (mV) Auto

Calibration Date: 2-21-22  
RDO: 100% sat. = 100%  
PH: 4.00 = Auto 7.00 = Auto 10.00 = Auto  
CONDUCTIVITY: 4.49 (std) = 4.50  
ORP (mV) Auto

Calibration Date: 2-22-22  
RDO: 100% sat. = 100%  
PH: 4.00 = Auto 7.00 = Auto 10.00 = Auto  
CONDUCTIVITY: 4.49 (std) = 4.49  
ORP (mV) Auto

Calibration Date: \_\_\_\_\_  
RDO: 100% sat. = \_\_\_\_\_  
PH: 4.00 = \_\_\_\_\_ 7.00 = \_\_\_\_\_ 10.00 = \_\_\_\_\_  
CONDUCTIVITY: \_\_\_\_\_  
ORP (mV) \_\_\_\_\_

Calibration Date: \_\_\_\_\_  
RDO: 100% sat. = \_\_\_\_\_  
PH: 4.00 = \_\_\_\_\_ 7.00 = \_\_\_\_\_ 10.00 = \_\_\_\_\_  
CONDUCTIVITY: \_\_\_\_\_  
ORP (mV) \_\_\_\_\_

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

|                               |  |                      |
|-------------------------------|--|----------------------|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> | DATE: <b>2-22-22</b> |
| WELL NO: <b>SW-5</b>          | SAMPLE ID:                             |                      |

**PURGING DATA**

|  |  |  |   |  |                     |            |  |  |                  |          |       |             |
|--|--|--|---|--|---------------------|------------|--|--|------------------|----------|-------|-------------|
| WELL DIAMETER (inches): <b>NA</b>  | TUBING DIAMETER (inches): <b>NA</b>                  | WELL SCREEN INTERVAL DEPTH: - feet to - feet | STATIC DEPTH TO WATER (feet): <b>NA</b> | PURGE PUMP TYPE OR BAILER: <b>NA</b>     |                     |            |  |  |                  |          |       |             |
| WELL ELEVATION TOC (RINGVD): <b>NA</b>   |  | GROUNDWATER ELEVATION (RINGVD): <b>NA</b>    |   |  |                     |            |  |  |                  |          |       |             |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)   |  |  |   |  |                     |            |  |  |                  |          |       |             |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)   |  |  |   |  |                     |            |  |  |                  |          |       |             |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b> | PURGING INITIATED AT: <b>NA</b>              | PURGING ENDED AT: <b>NA</b>             | TOTAL VOLUME PURGED (gallons): <b>NA</b> |                     |            |  |  |                  |          |       |             |
| TIME   | VOLUME PURGED (gallons)                              | CUMUL. VOLUME PURGED (gallons)               | PURGE RATE (gpm)                        | DEPTH TO WATER (feet)                    | pH (standard units) | TEMP. (°C) | COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$ | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR        |
| 0705   | NA   | NA   | NA                                      | NA                                       | 7.54                | 17.2       | 284  | 7.4  | 8.8              | 2.0      | SW    | Yellow tint |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016<br>PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify) |  |  |   |  |                     |            |  |  |                  |          |       |             |

**SAMPLING DATA**

|   |   |  |              |                                    |                                       |                         |
|---|---|--|--------------|------------------------------------|---------------------------------------|-------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAVID ARMOUR / TAGC</b>  |   | SAMPLER(S) SIGNATURE(S):                                     |              | SAMPLING INITIATED AT: <b>0705</b> | SAMPLING ENDED AT: <b>NR</b>          |                         |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>  | TUBING MATERIAL CODE: <b>NA</b>                   | FIELD FILTERED: <b>Y</b> <input checked="" type="checkbox"/> | FILTER SIZE: |                                    |                                       |                         |
| FIELD DECONTAMINATION: PUMP <b>Y</b> N <b>NA</b>  | TUBING <b>Y</b> N (replaced)                      | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |              |                                    |                                       |                         |
| SAMPLE CONTAINER SPECIFICATION  |   | SAMPLE PRESERVATION  |              | INTENDED ANALYSIS AND/OR METHOD    | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
| SAMPLE ID CODE  | # CONTAINERS                                      | MATERIAL CODE  | VOLUME       | PRESERVATIVE USED                  | TOTAL VOL ADDED IN FIELD (mL)         | FINAL pH                |
| <b>Ⓢ</b>  | <b>SEE SAMPLE 60-6 AND BOTTLE ORDER WORKSHEET</b> |  |              |                                    |                                       |                         |
| REMARKS: <b>SCREEN: No SW-5 = SURFACE WATER POINT - FLOW AT WEIR</b>  |   |  |              |                                    |                                       |                         |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  |   |  |              |                                    |                                       |                         |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |   |  |              |                                    |                                       |                         |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3):  
 pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

|                               |  |                      |
|-------------------------------|--|----------------------|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> | DATE: <b>2-22-22</b> |
| WELL NO: <b>SW-6</b>          | SAMPLE ID:                             |                      |

**PURGING DATA**

|  |  |  |   |  |                     |            |                                       |   |                  |          |       |                |
|--|--|--|---|--|---------------------|------------|---------------------------------------|---|------------------|----------|-------|----------------|
| WELL DIAMETER (Inches): <b>NA</b>  | TUBING DIAMETER (Inches): <b>NA</b>                  | WELL SCREEN INTERVAL DEPTH: - feet to - feet | STATIC DEPTH TO WATER (feet): <b>NA</b> | PURGE PUMP TYPE OR BAILER: <b>NA</b>     |                     |            |                                       |   |                  |          |       |                |
| WELL ELEVATION TOC (RINGVD): <b>NA</b>   |  | GROUNDWATER ELEVATION (RINGVD): <b>NA</b>    |   |  |                     |            |                                       |   |                  |          |       |                |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)   |  |  |   |  |                     |            |                                       |   |                  |          |       |                |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)   |  |  |   |  |                     |            |                                       |   |                  |          |       |                |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b> | PURGING INITIATED AT: <b>NA</b>              | PURGING ENDED AT: <b>NA</b>             | TOTAL VOLUME PURGED (gallons): <b>NA</b> |                     |            |                                       |   |                  |          |       |                |
| TIME   | VOLUME PURGED (gallons)                              | CUMUL. VOLUME PURGED (gallons)               | PURGE RATE (gpm)                        | DEPTH TO WATER (feet)                    | pH (standard units) | TEMP. (°C) | COND. (micro units) µmhos/cm or µS/cm | DISSOLVED OXYGEN (micro units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR           |
| 0650   | NA   | NA   | NA                                      | NA                                       | 6.85                | 17.4       | 282                                   | 7.2   | 12.3             | 77       | 3.1   | Yellow<br>Turb |
| <small>WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.66; 5" = 1.02; 6" = 1.47; 12" = 5.88<br/>         TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016</small> |  |  |   |  |                     |            |                                       |   |                  |          |       |                |
| <small>PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)</small>   |  |  |   |  |                     |            |                                       |   |                  |          |       |                |

**SAMPLING DATA**

|   |              |               |        |   |                               |          |  |  |  |                                       |  |                         |
|---|--------------|---------------|--------|---|-------------------------------|----------|--|--|--|---------------------------------------|--|-------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / ACC</b>   |              |               |        | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>             |                               |          |  | SAMPLING INITIATED AT: <b>0650</b>                           |  | SAMPLING ENDED AT: <b>NR</b>          |  |                         |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>  |              |               |        | TUBING MATERIAL CODE: <b>NA</b>                         |                               |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |  | FILTER SIZE: _____                    |  |                         |
| FIELD DECONTAMINATION: PUMP <b>Y</b> TUBING <b>Y</b> N (replaced)   |              |               |        | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/> |                               |          |  |  |  |                                       |  |                         |
| SAMPLE CONTAINER SPECIFICATION  |              |               |        | SAMPLE PRESERVATION                                     |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                              |  | SAMPLE PUMP FLOW RATE (mL per minute) |  | SAMPLING EQUIPMENT CODE |
| SAMPLE ID CODE  | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                       | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |  |  |  |                                       |  |                         |
| <b>⑤</b>  |              |               |        |   |                               |          | <b>SEE SAMPLE L-0-4 AND BOTTLE ORDER WORKSHEET</b> |  |  |                                       |  |                         |
| REMARKS: <b>SCREEN: No SW-6 = SURFACE WATER POINT Taken From Pond No Flow At Well</b>   |              |               |        |   |                               |          |  |  |  |                                       |  |                         |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  |              |               |        |   |                               |          |  |  |  |                                       |  |                         |
| SAMPLING EQUIPMENT CODES: APP = Aftair Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |              |               |        |   |                               |          |  |  |  |                                       |  |                         |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

|                               |            |  |  |
|-------------------------------|------------|--|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>SW-7</b>          | SAMPLE ID: | DATE: <b>1-22-22</b>                   |  |

**PURGING DATA**

|   |                                     |  |   |                                      |                     |            |   |   |                  |          |         |      |
|---|-------------------------------------|--|---|--------------------------------------|---------------------|------------|---|---|------------------|----------|---------|------|
| WELL DIAMETER (inches): <b>NA</b>   | TUBING DIAMETER (inches): <b>NA</b> | WELL SCREEN INTERVAL DEPTH: - feet to - feet         | STATIC DEPTH TO WATER (feet): <b>NA</b> | PURGE PUMP TYPE OR BAILER: <b>NA</b> |                     |            |   |   |                  |          |         |      |
| WELL ELEVATION TOG (RINGVD): <b>NA</b>  |                                     | GROUNDWATER ELEVATION (RINGVD): <b>NA</b>            |   |                                      |                     |            |   |   |                  |          |         |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable) = (        feet -        feet ) X        gallons/foot =        gallons   |                                     |  |   |                                      |                     |            |   |   |                  |          |         |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable) =        gallons + (        gallons/foot X        feet ) +        gallons =        gallons                  |                                     |  |   |                                      |                     |            |   |   |                  |          |         |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>  |                                     | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b> |   | PURGING INITIATED AT: <b>NA</b>      |                     |            |   |   |                  |          |         |      |
|   |                                     |  |   | PURGING ENDED AT: <b>NA</b>          |                     |            |   |   |                  |          |         |      |
| TOTAL VOLUME PURGED (gallons): <b>NA</b>  |                                     |  |   |                                      |                     |            |   |   |                  |          |         |      |
| TIME  | VOLUME PURGED (gallons)             | CUMUL. VOLUME PURGED (gallons)                       | PURGE RATE (gpm)                        | DEPTH TO WATER (feet)                | pH (standard units) | TEMP. (°C) | COND. (circles units)<br><small>µmhos/cm or µS/cm</small> | DISSOLVED OXYGEN (circles units)<br><small>mg/L or % saturation</small> | TURBIDITY (NTUs) | ORP (mV) | COLOR   | ODOR |
| 0725  | NA                                  | NA   | NA                                      | NA                                   | 6.94                | 15.8       | 108   | 4.2   | 13.0             | 11       | YEL Low | TWT  |
| WELL CAPACITY (Gallons Per Foot): 0.75"=0.02; 1"=0.04; 1.25"=0.08; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.47; 12"=5.88<br>TUBING INSIDE DIA. CAPACITY (Gal/FL): 1/8"=0.0008; 3/16"=0.0014; 1/4"=0.0028; 5/16"=0.004; 3/8"=0.008; 1/2"=0.010; 5/8"=0.018 |                                     |  |   |                                      |                     |            |   |   |                  |          |         |      |
| PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)   |                                     |  |   |                                      |                     |            |   |   |                  |          |         |      |

**SAMPLING DATA**

|  |                      |                        |   |                     |                               |   |                                 |                              |                                       |                         |
|--|----------------------|------------------------|---|---------------------|-------------------------------|---|---------------------------------|------------------------------|---------------------------------------|-------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>RED ARMOUR / ACC</b>  |                      |                        | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i> |                     |                               | SAMPLING INITIATED AT: <b>0725</b>                      |                                 | SAMPLING ENDED AT: <b>NR</b> |                                       |                         |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>   |                      |                        | TUBING MATERIAL CODE: <b>NA</b>             |                     |                               | FIELD-FILTERED: <b>Y</b>                                |                                 | FILTER SIZE:                 |                                       |                         |
| FIELD DECONTAMINATION: PUMP <b>Y</b> N <b>NA</b>   |                      |                        | TUBING <b>Y</b> N (replaced)                |                     |                               | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/> |                                 |                              |                                       |                         |
| SAMPLE CONTAINER SPECIFICATION   |                      |                        |   | SAMPLE PRESERVATION |                               |   | INTENDED ANALYSIS AND/OR METHOD |                              | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
| SAMPLE ID CODE   | # CONTAINERS         | MATERIAL CODE          | VOLUME                                      | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH  |                                 |                              |                                       |                         |
| <input checked="" type="checkbox"/>  | SEE SAMPLE 6-D-4 AND | BOTTLE ORDER WORKSHEET |   |                     |                               |   |                                 |                              |                                       |                         |
| REMARKS: <b>SACEN: No SW-7 = SURFACE WATER POINT</b>   |                      |                        |   |                     |                               |   |                                 |                              |                                       |                         |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)   |                      |                        |   |                     |                               |   |                                 |                              |                                       |                         |
| SAMPLING EQUIPMENT CODES: APP = Airt Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |                      |                        |   |                     |                               |   |                                 |                              |                                       |                         |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |  |
|-------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> |
| WELL NO: <b>SW-4</b>          | DATE: <b>2-22-22</b>                   |

**PURGING DATA**

|   |  |  |   |  |                     |            |  |  |                  |          |          |             |
|---|--|--|---|--|---------------------|------------|--|--|------------------|----------|----------|-------------|
| WELL DIAMETER (Inches): <b>NA</b>   | TUBING DIAMETER (Inches): <b>NA</b>                  | WELL SCREEN INTERVAL DEPTH: - feet to - feet | STATIC DEPTH TO WATER (feet): <b>NA</b> | PURGE PUMP TYPE OR BAILER: <b>NA</b>     |                     |            |  |  |                  |          |          |             |
| WELL ELEVATION TOC (RINGVD): <b>NA</b>  |  | GROUNDWATER ELEVATION (RINGVD): <b>NA</b>    |   |  |                     |            |  |  |                  |          |          |             |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)  |  |  |   |  |                     |            |  |  |                  |          |          |             |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)  |  |  |   |  |                     |            |  |  |                  |          |          |             |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>  | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b> | PURGING INITIATED AT: <b>NA</b>              | PURGING ENDED AT: <b>NA</b>             | TOTAL VOLUME PURGED (gallons): <b>NA</b> |                     |            |  |  |                  |          |          |             |
| TIME  | VOLUME PURGED (gallons)                              | CUMUL. VOLUME PURGED (gallons)               | PURGE RATE (gpm)                        | DEPTH TO WATER (feet)                    | pH (standard units) | TEMP. (°C) | COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$ | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mv) | COLOR    | ODOR        |
| 0750  | NA   | NA   | NA                                      | NA                                       | 7.02                | 15.2       | 181  | 6.6  | 8.6              | 19       | VERY SLT | YELLOW TINT |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.009; 1/2" = 0.010; 5/8" = 0.016 |  |  |   |  |                     |            |  |  |                  |          |          |             |
| PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)   |  |  |   |  |                     |            |  |  |                  |          |          |             |

**SAMPLING DATA**

|   |   |               |        |   |                               |          |  |  |  |                              |  |
|---|---|---------------|--------|---|-------------------------------|----------|--|--|--|------------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / ACC</b>   |   |               |        | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i> |                               |          |  | SAMPLING INITIATED AT: <b>0750</b>                           |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>  |   |               |        | TUBING MATERIAL CODE: <b>NA</b>             |                               |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |  | FILTER SIZE: <b>µm</b>       |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> N <b>NA</b>  |   |               |        | TUBING <b>Y</b> N (replaced) <b>NA</b>      |                               |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION  |   |               |        | SAMPLE PRESERVATION                         |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                              |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE  | # CONTAINERS                                      | MATERIAL CODE | VOLUME | PRESERVATIVE USED                           | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |  |  |  |                              |  |
| <b>ⓧ</b>  | <b>SEE SAMPLE LD-4 AND BOTTLE ORDER WORKSHEET</b> |               |        |   |                               |          |  |  |  |                              |  |
| REMARKS: <b>SCREEN: No SW-4 = SURFACE WATER POINT - FLOW AT WEIR</b>  |   |               |        |   |                               |          |  |  |  |                              |  |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  |   |               |        |   |                               |          |  |  |  |                              |  |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Siphon Method (Tubing Gravity Drain); O = Other (Specify) |   |               |        |   |                               |          |  |  |  |                              |  |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# Form FD 9000-24 GROUNDWATER SAMPLING LOG

|                               |  |
|-------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> |
| WELL NO: <b>SW-3</b>          | DATE: <b>2-22-22</b>                   |

### PURGING DATA

|   |                                     |  |   |                                      |
|---|-------------------------------------|--|---|--------------------------------------|
| WELL DIAMETER (inches): <b>NA</b>       | TUBING DIAMETER (inches): <b>NA</b> | WELL SCREEN INTERVAL DEPTH: <b>-</b> feet to <b>-</b> feet | STATIC DEPTH TO WATER (feet): <b>NA</b> | PURGE PUMP TYPE OR BAILER: <b>NA</b> |
| WELL ELEVATION TOC (ft NGVD): <b>NA</b> |                                     | GROUNDWATER ELEVATION (ft NGVD): <b>NA</b>                 |   |                                      |

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
(only fill out if applicable)

= (                      ) feet - (                      ) feet X                      gallons/foot =                      gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
(only fill out if applicable)

=                      gallons + (                      gallons/foot X                      feet) +                      gallons =                      gallons

|  |  |                                 |                             |  |
|--|--|---------------------------------|-----------------------------|--|
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b> | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b> | PURGING INITIATED AT: <b>NA</b> | PURGING ENDED AT: <b>NA</b> | TOTAL VOLUME PURGED (gallons): <b>NA</b> |
|--|--|---------------------------------|-----------------------------|--|

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units) µmhos/cm or µS/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR          | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--|--|------------------|----------|----------------|------|
| 0820 | NA                      | NA                             | NA               | NA                    | 7.74                | 17.2       | 606                                    | 7.7  | 5.7              | -5       | Yellow<br>Turb |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |
|      |                         |                                |                  |                       |                     |            |  |  |                  |          |                |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal/Ft): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

|  |                                 |  |                                      |
|--|---------------------------------|--|--------------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION:<br><b>DAN ARMOUR / ACC</b>   | SAMPLER(S) SIGNATURE(S):<br>    | SAMPLING INITIATED AT: <b>0820</b>   | SAMPLING ENDED AT: <b>NR</b>         |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>   | TUBING MATERIAL CODE: <b>NA</b> | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/>   | FILTER SIZE:                      µm |
| FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA |                                 | TUBING <input type="checkbox"/> Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/> NA |                                      |
| DUPLICATE: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N  |                                 |  |                                      |

| SAMPLE CONTAINER SPECIFICATION                       |              |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--|--------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE ID CODE                                       | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| <b>* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET</b> |              |               |        |                     |                               |          |                                 |                                       |                         |
|  |              |               |        |                     |                               |          |                                 |                                       |                         |
|  |              |               |        |                     |                               |          |                                 |                                       |                         |
|  |              |               |        |                     |                               |          |                                 |                                       |                         |
|  |              |               |        |                     |                               |          |                                 |                                       |                         |
|  |              |               |        |                     |                               |          |                                 |                                       |                         |
|  |              |               |        |                     |                               |          |                                 |                                       |                         |
|  |              |               |        |                     |                               |          |                                 |                                       |                         |
|  |              |               |        |                     |                               |          |                                 |                                       |                         |

REMARKS: **SW-3 = SURFACE WATER POINT SHEEN! NA**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009





Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

|                               |  |
|-------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> |
| WELL NO: <b>SW-B</b>          | DATE: <b>2.22.22</b>                   |

**PURGING DATA**

|   |  |  |   |  |                     |            |  |  |                  |          |       |      |
|---|--|--|---|--|---------------------|------------|--|--|------------------|----------|-------|------|
| WELL DIAMETER (Inches): <b>NA</b>   | TUBING DIAMETER (Inches): <b>NA</b>                  | WELL SCREEN INTERVAL DEPTH: - feet to - feet | STATIC DEPTH TO WATER (feet): <b>NA</b> | PURGE PUMP TYPE OR BAILER: <b>NA</b>     |                     |            |  |  |                  |          |       |      |
| WELL ELEVATION TOC (RINGVD): <b>NA</b>  |  | GROUNDWATER ELEVATION (RINGVD): <b>NA</b>    |   |  |                     |            |  |  |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)                |  |  |   |  |                     |            |  |  |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable) |  |  |   |  |                     |            |  |  |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>  | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b> | PURGING INITIATED AT: <b>NA</b>              | PURGING ENDED AT: <b>NA</b>             | TOTAL VOLUME PURGED (gallons): <b>NA</b> |                     |            |  |  |                  |          |       |      |
| TIME  | VOLUME PURGED (gallons)                              | CUMUL VOLUME PURGED (gallons)                | PURGE RATE (gpm)                        | DEPTH TO WATER (feet)                    | pH (standard units) | TEMP. (°C) | COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$ | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|   | <b>NA</b>  | <b>NA</b>                                    | <b>NA</b>                               | <b>NA</b>                                |                     |            |  |  |                  |          |       |      |
| (X) NO SAMPLE COLLECTED   |  |  |   |  |                     |            |  |  |                  |          |       |      |
| THE CANAL HAS SEVERAL DISPOSED BUNDLES OF WATER BUT NO FLOW AT POINT  |  |  |   |  |                     |            |  |  |                  |          |       |      |
| - DRY   |  |  |   |  |                     |            |  |  |                  |          |       |      |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88    |  |  |   |  |                     |            |  |  |                  |          |       |      |
| TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.016   |  |  |   |  |                     |            |  |  |                  |          |       |      |
| PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)           |  |  |   |  |                     |            |  |  |                  |          |       |      |

**SAMPLING DATA**

|  |              |               |                                 |                     |                               |  |                                 |                                       |                         |
|--|--------------|---------------|---------------------------------|---------------------|-------------------------------|--|---------------------------------|---------------------------------------|-------------------------|
| SAMPLED BY (PRINT) / AFFILIATION:<br><b>DAN ARMOUR<br/>BLAKE GRISON / ACC</b>  |              |               | SAMPLER(S) SIGNATURE(S):<br>    |                     |                               | SAMPLING INITIATED AT:   |                                 | SAMPLING ENDED AT: <b>NR</b>          |                         |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>   |              |               | TUBING MATERIAL CODE: <b>NA</b> |                     |                               | FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> |                                 | FILTER SIZE                           |                         |
| FIELD DECONTAMINATION: PUMP Y N <b>NA</b>  |              |               | TUBING Y N (replaced)           |                     |                               | DUPLICATE Y <input checked="" type="checkbox"/> N <input type="checkbox"/>       |                                 |                                       |                         |
| SAMPLE CONTAINER SPECIFICATION   |              |               |                                 | SAMPLE PRESERVATION |                               |  | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
| SAMPLE ID CODE   | # CONTAINERS | MATERIAL CODE | VOLUME                          | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH   |                                 |                                       |                         |
|  |              |               |                                 |                     |                               |  |                                 |                                       |                         |
| (X) SEE SAMPLE L-D-4 AND BOTTLE ORDER WORKSHEET  |              |               |                                 |                     |                               |  |                                 |                                       |                         |
| REMARKS:<br><b>SW-B = SURFACE WATER POINT</b>  |              |               |                                 |                     |                               |  |                                 |                                       |                         |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)   |              |               |                                 |                     |                               |  |                                 |                                       |                         |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |              |               |                                 |                     |                               |  |                                 |                                       |                         |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

# GROUNDWATER SAMPLING LOG

|                               |  |
|-------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> |
| WELL NO: <b>SGMW-1SR</b>      | DATE: <b>2-21-22</b>                   |

### PURGING DATA

|  |                                      |  |  |                                      |
|--|--------------------------------------|--|--|--------------------------------------|
| WELL DIAMETER (inches): <b>2</b>   | TUBING DIAMETER (inches): <b>1.4</b> | WELL SCREEN INTERVAL DEPTH: <b>3.2 feet to 18.2 feet</b> | STATIC DEPTH TO WATER (feet): <b>15.97</b> | PURGE PUMP TYPE OR BAILER: <b>PP</b> |
| WELL ELEVATION TOC (ft NGVD): <b>NA</b>  |                                      | GROUNDWATER ELEVATION (ft NGVD): <b>NA</b>               |  |                                      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>$= (18.20 \text{ feet} - 15.97 \text{ feet}) \times 0.163 \text{ gallons/foot} = 0.36 \text{ gallons}$   |                                      |  |  |                                      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>$= 0.0 \text{ gallons} + (0.002 \text{ gallons/foot} \times 18.20 \text{ feet}) + 0.05 \text{ gallons} = 0.10 \text{ gallons}$ |                                      |  |  |                                      |

|   |   |                                   |                               |  |
|---|---|-----------------------------------|-------------------------------|--|
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>18.10</b> | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>18.10</b> | PURGING INITIATED AT: <b>1619</b> | PURGING ENDED AT: <b>1639</b> | TOTAL VOLUME PURGED (gallons): <b>1.60</b> |
|---|---|-----------------------------------|-------------------------------|--|

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (percent units) mg/L or % saturation | TURBIDITY (NTU) | ORP (mv) | COLOR  | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|---|-----------------|----------|--------|------|
| 1629 | 0.80                    | 0.80                           | 0.08             | 16.64                 | 5.63                | 24.6       | 351                            | 0.7   | 6.5             | -36      |        |      |
| 1632 | 0.24                    | 1.04                           | 0.08             | 16.65                 | 5.60                | 24.5       | 350                            | 0.7   | 8.0             | -37      |        |      |
| 1635 | 0.24                    | 1.28                           | 0.08             | 16.65                 | 5.58                | 24.5       | 347                            | 0.7   | 8.6             | -38      |        |      |
| 1638 | 0.24                    | 1.52                           | 0.08             | 16.65                 | 5.57                | 24.4       | 342                            | 0.7   | 9.2             | -30      | 3.5    |      |
|      |                         |                                |                  |                       |                     |            |                                |   |                 |          | Yellow |      |
|      |                         |                                |                  |                       |                     |            |                                |   |                 |          | Turb   |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.66; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0005; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.018

PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

|   |                                 |                                    |                              |
|---|---------------------------------|------------------------------------|------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DANAY ARMOUR / ACC</b> | SAMPLER(S) SIGNATURE(S):        | SAMPLING INITIATED AT: <b>1639</b> | SAMPLING ENDED AT: <b>NR</b> |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>18.10</b>           | TUBING MATERIAL CODE: <b>PE</b> | FIELD-FILTERED: <b>Y (N)</b>       | FILTER SIZE: _____           |
| FIELD DECONTAMINATION: PUMP <b>Y (N)</b>                    | TUBING <b>Y (N) (replaced)</b>  | DUPLICATE: <b>Y (N)</b>            |                              |

| SAMPLE CONTAINER SPECIFICATION                       |              |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--|--------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE ID CODE                                       | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| <b>* SEE SAMPLE C-D-C AND BOTTLE ORDER WORKSHEET</b> |              |               |        |                     |                               |          |                                 |                                       |                         |

REMARKS: **SHEEN, NO**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; B = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 22-12, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

|                               |  |
|-------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> |
| WELL NO: <b>MWB11S</b>        | DATE: <b>2-21-22</b>                   |

| PURGING DATA   |  |  |  |
|--|--|--|--|
| WELL DIAMETER (Inches): <b>2</b>   | TUBING DIAMETER (Inches): <b>3/8</b>           | WELL SCREEN INTERVAL DEPTH: <b>9.5 feet to 19.5 feet</b> | STATIC DEPTH TO WATER (feet): <b>11.85</b> |
| WELL ELEVATION TOC (ft NGVD): <b>120.81</b>  | GROUNDWATER ELEVATION (ft NGVD): <b>108.96</b> |  | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br><b>19.50 feet - 11.85 feet = 7.65 feet X 0.163 gallons/foot = 1.25 gallons</b>     |  |  |  |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME X (TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br><b>0.3 gallons + (0.006 gallons/foot X 19.50 feet) + 0.05 gallons = 0.47 gallons</b> |  |  |  |

| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b> | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b> | PURGING INITIATED AT: <b>1513</b> | PURGING ENDED AT: <b>1533</b> | TOTAL VOLUME PURGED (gallons): <b>3.20</b> |                     |            |                                |   |                  |          |       |      |
|---|---|-----------------------------------|-------------------------------|--|---------------------|------------|--------------------------------|---|------------------|----------|-------|------|
| TIME  | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)    | PURGE RATE (gpm)              | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (dissolved units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1523  | 1.60  | 1.60                              | 0.16                          | 11.96                                      | 4.43                | 27.3       | 115                            | 0.6   | 3.3              | 224      |       |      |
| 1526  | 0.48  | 2.08                              | 0.16                          | 11.96                                      | 4.42                | 27.2       | 115                            | 0.7   | 3.7              | 227      |       |      |
| 1529  | 0.48  | 2.56                              | 0.16                          | 11.96                                      | 4.42                | 27.2       | 116                            | 0.6   | 3.2              | 228      |       |      |
| 1532  | 0.48  | 3.04                              | 0.16                          | 11.96                                      | 4.42                | 27.2       | 116                            | 0.6   | 3.8              | 230      | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.04; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 6.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0009; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.018  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

|   |                                |                                    |                              |
|---|--------------------------------|------------------------------------|------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / ACC</b>           | SAMPLER(S) SIGNATURE(S):       | SAMPLING INITIATED AT: <b>1533</b> | SAMPLING ENDED AT: <b>NR</b> |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b>                   | TUBING MATERIAL CODE: <b>T</b> | FIELD-FILTERED: <b>Y</b> (N)       | FILTER SIZE: _____           |
| FIELD DECONTAMINATION: PUMP <b>Y</b> (N) TUBING <b>Y</b> (replaced) | DUPLICATE: <b>Y</b> (N)        |                                    |                              |

| SAMPLE CONTAINER SPECIFICATION |              |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|--------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | # CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     |                                 |                                       |                         |
| <b>*</b>                       | <b>SEE</b>   | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDEP</b> | <b>WORKSHEET</b>                |                                       |                         |

REMARKS: **Shoen Present YES (NO)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: **TRAIL RIDGE** SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **SGMW-25** SAMPLE ID: \_\_\_\_\_ DATE: **2-21-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2** TUBING DIAMETER (Inches): **1.4** WELL SCREEN INTERVAL DEPTH: **7.7** feet TO WATER (feet): **15.41** STATIC DEPTH TO WATER (feet): **15.41** PURGE PUMP TYPE OR BAILER: **PP**  
 WELL ELEVATION TOC (ft NGVD): **NA** GROUNDWATER ELEVATION (ft NGVD): **NA**  
 WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 = (17.70 feet - 15.41 feet) X 0.163 gallons/foot = 0.37 gallons  
 EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = 0.0 gallons + (0.0026 gallons/foot X 17.90 feet) + 0.05 gallons = 0.10 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **17.50** FINAL PUMP OR TUBING DEPTH IN WELL (feet): **17.50** PURGING INITIATED AT: **1544** PURGING ENDED AT: **1604** TOTAL VOLUME PURGED (gallons): **1.60**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (mg/L or % saturation) | TURBIDITY (NTUs) | ORP (mV) | COLOR       | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|---|------------------|----------|-------------|------|
| 1554 | 0.20                    | 0.80                           | 0.08             | 15.76                 | 5.05                | 24.9       | 37                             | 0.5                                     | 4.6              | -9       |             |      |
| 1557 | 0.24                    | 1.04                           | 0.08             | 15.76                 | 5.07                | 24.8       | 37                             | 0.5                                     | 4.3              | -8       |             |      |
| 1600 | 0.24                    | 1.28                           | 0.08             | 15.77                 | 5.07                | 24.8       | 37                             | 0.5                                     | 4.0              | -7       |             |      |
| 1603 | 0.24                    | 1.52                           | 0.08             | 15.77                 | 5.08                | 24.7       | 37                             | 0.5                                     | 4.7              | -7       | SWT         |      |
|      |                         |                                |                  |                       |                     |            |                                |   |                  |          | Yellow tint |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.018  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: **DANNY ADAMS / ACC** SAMPLER(S) SIGNATURE(S): \_\_\_\_\_ SAMPLING INITIATED AT: **1604** SAMPLING ENDED AT: **NR**  
 PUMP OR TUBING DEPTH IN WELL (feet): **17.50** TUBING MATERIAL CODE: **PE** FIELD-FILTERED: **Y** (H) FILTER SIZE: \_\_\_\_\_  
 FIELD DECONTAMINATION: PUMP **Y** (N) TUBING **Y** (N) DUPLICATE: **Y** (N)  
 FIELD Filtration Equipment Type: \_\_\_\_\_

| SAMPLE CONTAINER SPECIFICATION |              |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|--------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE ID CODE                 | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
|                                |              |               |        |                     |                               |          |                                 |                                       |                         |
|                                |              |               |        |                     |                               |          |                                 |                                       |                         |
|                                |              |               |        |                     |                               |          |                                 |                                       |                         |
|                                |              |               |        |                     |                               |          |                                 |                                       |                         |

REMARKS: Sheen Present: **YES** (NO)  
 MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)  
 SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RPPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION J)  
 pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 6 NTU or ± 10% (whichever is greater)

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

|                                   |  |
|-----------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b>     | SITE LOCATION: <b>JACKSONVILLE, FL</b> |
| WELL NO: <b>EQUIPMENT BLANK 2</b> | DATE: <b>2-21-22</b>                   |

**PURGING DATA**

|  |  |  |   |  |                     |            |  |  |                  |          |       |      |
|--|--|--|---|--|---------------------|------------|--|--|------------------|----------|-------|------|
| WELL DIAMETER (inches): <b>NA</b>  | TUBING DIAMETER (inches): <b>NA</b>                  | WELL SCREEN INTERVAL DEPTH: - feet to - feet | STATIC DEPTH TO WATER (feet): <b>NA</b> | PURGE PUMP TYPE OR BAILER: <b>NA</b>     |                     |            |  |  |                  |          |       |      |
| WELL ELEVATION TOC (RINGVD): <b>NA</b>   |  | GROUNDWATER ELEVATION (RINGVD): <b>NA</b>    |   |  |                     |            |  |  |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)                 |  |  |   |  |                     |            |  |  |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable) |  |  |   |  |                     |            |  |  |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b> | PURGING INITIATED AT: <b>NA</b>              | PURGING ENDED AT: <b>NA</b>             | TOTAL VOLUME PURGED (gallons): <b>NA</b> |                     |            |  |  |                  |          |       |      |
| TIME   | VOLUME PURGED (gallons)                              | CUMUL. VOLUME PURGED (gallons)               | PURGE RATE (gpm)                        | DEPTH TO WATER (feet)                    | pH (standard units) | TEMP. (°C) | COND. (circle units) $\mu$ mhos/cm or $\mu$ S/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1730   | NA   | NA   | NA                                      | NA                                       | 6.84                | 23.6       | 4  | 1.0  | 0.0              | 27       | None  |      |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88     |  |  |   |  |                     |            |  |  |                  |          |       |      |
| TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016    |  |  |   |  |                     |            |  |  |                  |          |       |      |
| PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)            |  |  |   |  |                     |            |  |  |                  |          |       |      |

**SAMPLING DATA**

|   |  |               |  |                     |   |                                    |                                  |                              |                                       |                         |
|---|--|---------------|--|---------------------|---|------------------------------------|----------------------------------|------------------------------|---------------------------------------|-------------------------|
| SAMPLED BY (PRINT) / AFFILIATION:<br><b>DAN ARMOUR / ACC</b>  |  |               | SAMPLER(S) SIGNATURE(S):<br><i>[Signature]</i> |                     |   | SAMPLING INITIATED AT: <b>1730</b> |                                  | SAMPLING ENDED AT: <b>NR</b> |                                       |                         |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>  |  |               | TUBING MATERIAL CODE: <b>NA</b>                |                     | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/>                    |                                    | FILTER SIZE: _____               |                              |                                       |                         |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/> N <input type="checkbox"/> TUBING <b>Y</b> <input checked="" type="checkbox"/> N (replaced) <input type="checkbox"/>                               |  |               |  |                     | DUPLICATE <b>Y</b> <input checked="" type="checkbox"/> <input type="checkbox"/> |                                    |                                  |                              |                                       |                         |
| SAMPLE CONTAINER SPECIFICATION  |  |               |  | SAMPLE PRESERVATION |   |                                    | INTENDED ANALYSIS AND/OR METHOD: |                              | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
| SAMPLE ID CODE  | # CONTAINERS                                       | MATERIAL CODE | VOLUME   | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL)   | FINAL pH                           |                                  |                              |                                       |                         |
| <b>26</b>   | <b>SEE SAMPLE L-D-4 AND BOTTLE ORDER WORKSHEET</b> |               |  |                     |   |                                    |                                  |                              |                                       |                         |
| REMARKS:<br><b>SHEG# No. EBL COMPLETED USING D.I. H2O PROVIDED BY AEL LABS</b>  |  |               |  |                     |   |                                    |                                  |                              |                                       |                         |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  |  |               |  |                     |   |                                    |                                  |                              |                                       |                         |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |  |               |  |                     |   |                                    |                                  |                              |                                       |                         |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH:  $\pm 0.2$  units; Temperature:  $\pm 0.2$  °C; Specific Conductance:  $\pm 5\%$ ; Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater); Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB11E (R)**      SAMPLE ID: \_\_\_\_\_      DATE: **2-21-22**

**PURGING DATA**

WELL DIAMETER (inches): **2**      TUBING DIAMETER (inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **45** feet to **55** feet      STATIC DEPTH TO WATER (feet): **16.24**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOC (ft NGVD): **120.43**      GROUNDWATER ELEVATION (ft NGVD): **104.19**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)      = ( \_\_\_\_\_ feet - \_\_\_\_\_ feet) X \_\_\_\_\_ gallons/foot = \_\_\_\_\_ gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)      = **0.3** gallons + (0.006 gallons/foot X **55.00** feet) + 0.05 gallons = **0.68** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **50.00**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **50.00**      PURGING INITIATED AT: **1447**      PURGING ENDED AT: **1507**      TOTAL VOLUME PURGED (gallons): **4.60**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (micro units mg/L or % saturation) | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|---|------------------|----------|-------|------|
| 1457 | 2.30                    | 2.30                           | 0.23             | 16.35                 | 4.25                | 28.2       | 34                             | 0.4   | 1.3              | 30       |       |      |
| 1500 | 0.69                    | 2.99                           | 0.23             | 16.36                 | 4.86                | 28.3       | 34                             | 0.3   | 1.8              | 29       |       |      |
| 1503 | 0.69                    | 3.68                           | 0.23             | 16.36                 | 4.87                | 28.3       | 34                             | 0.3   | 2.1              | 31       |       |      |
| 1506 | 0.69                    | 4.37                           | 0.23             | 16.36                 | 4.88                | 28.3       | 34                             | 0.3   | 2.2              | 28       | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.80  
 TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.018  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_      SAMPLING INITIATED AT: **1507**      SAMPLING ENDED AT: **NR**

PUMP OR TUBING DEPTH IN WELL (feet): **50.00**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y (N)**      FILTER SIZE: \_\_\_\_\_  
 µm      Filtration Equipment Type: \_\_\_\_\_

FIELD DECONTAMINATION: PUMP **Y (C)**      TUBING **Y (D) (replaced)**      DUPLICATE: **Y (D)**

| SAMPLE CONTAINER SPECIFICATION |            |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     |                                 |                                       |                         |
| <b>*</b>                       | <b>SEE</b> | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDER</b> | <b>WORKSHEET</b>                |                                       |                         |

REMARKS: **Shoen Present YES (N)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Aher Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

- NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION J)  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

|                               |  |
|-------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> |
| WELL NO: <b>MWB-39I</b>       | DATE: <b>2-9-22</b>                    |

### PURGING DATA

|  |                                      |  |  |                                      |
|--|--------------------------------------|--|--|--------------------------------------|
| WELL DIAMETER (Inches): <b>2</b>   | TUBING DIAMETER (Inches): <b>1.4</b> | WELL SCREEN INTERVAL DEPTH (ft): <b>3.88</b> | STATIC DEPTH TO WATER (feet): <b>13.65</b> | PURGE PUMP TYPE OR BAILER: <b>PP</b> |
| WELL ELEVATION TOG (if NGVO): <b>NA</b>  |                                      | GROUNDWATER ELEVATION (if NGVO): <b>NA</b>   |  |                                      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)                 |                                      |  |  |                                      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable) |                                      |  |  |                                      |

|   |   |                                   |                               |  |                     |            |                           |   |                  |          |       |      |
|---|---|-----------------------------------|-------------------------------|--|---------------------|------------|---------------------------|---|------------------|----------|-------|------|
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>55.88</b> | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>55.88</b> | PURGING INITIATED AT: <b>1654</b> | PURGING ENDED AT: <b>1719</b> | TOTAL VOLUME PURGED (gallons): <b>3.00</b> |                     |            |                           |   |                  |          |       |      |
| TIME  | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)    | PURGE RATE (gpm)              | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (micro/cm or µS/cm) | DISSOLVED OXYGEN (mg/L or % saturation) | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1704  | 1.50  | 1.50                              | 0.15                          | 14.64                                      | 5.29                | 25.5       | 35                        | 0.5                                     | 1.1              | 52       |       |      |
| 1707  | 0.45  | 1.95                              | 0.15                          | 14.64                                      | 5.27                | 25.5       | 35                        | 0.5                                     | 2.2              | 60       |       |      |
| 1710  | 0.45  | 2.40                              | 0.15                          | 14.64                                      | 5.29                | 25.5       | 35                        | 0.5                                     | 2.6              | 63       |       |      |
| 1713  | 0.45  | 2.85                              | 0.15                          | 14.65                                      | 5.30                | 25.5       | 35                        | 0.5                                     | 2.8              | 66       | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.68  
 TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

|  |  |   |                              |
|--|--|---|------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION:<br><b>DANNY ARMOUR / ACC</b>   | SAMPLER(S) SIGNATURE(S):<br><i>[Signature]</i>       | SAMPLING INITIATED AT: <b>1714</b>                        | SAMPLING ENDED AT: <b>NR</b> |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>55.88</b>  | TUBING MATERIAL CODE: <b>PE</b>                      | FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N) | FILTER SIZE: _____           |
| FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (N) | DUPLICATE: Y <input checked="" type="checkbox"/> (N) |   |                              |

| SAMPLE CONTAINER SPECIFICATION                   |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE ID CODE                                   | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| <b>SEE SAMPLE LOG AND BOTTLE ORDER WORKSHEET</b> |            |               |        |                     |                               |          |                                 |                                       |                         |

REMARKS:  
 Sheen Present: YES  (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009



# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE** SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB215** SAMPLE ID: \_\_\_\_\_ DATE: **2-21-22**

**PURGING DATA**  
 WELL DIAMETER (Inches): **2** TUBING DIAMETER (Inches): **1/8** WELL SCREEN INTERVAL DEPTH: **2** feet to **18** feet STATO DEPTH TO WATER (feet): **11.38** PURGE PUMP TYPE OR BAILER: **BP**  
 WELL ELEVATION TOC (ft NGVD): **122.84** GROUNDWATER ELEVATION (ft NGVD): **111.46**  
 WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 = **118.00** feet - **11.38** (feet) X **0.163** gallons/foot = **1.08** gallons  
 EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = **0.3** gallons + (**0.006** gallons/foot X **18.00** feet) + **0.05** gallons = **0.46** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **13.00** FINAL PUMP OR TUBING DEPTH IN WELL (feet): **13.00** PURGING INITIATED AT: **1409** PURGING ENDED AT: **1429** TOTAL VOLUME PURGED (gallons): **3.20**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>µmhos/cm or µS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR  | ODOUR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---|---|------------------|----------|--------|-------|
| 1419 | 1.60                    | 1.60                           | 0.16             | 12.65                 | 6.02                | 25.1       | 1070                                      | 0.4   | 1.9              | -87      |        |       |
| 1422 | 0.48                    | 2.08                           | 0.16             | 12.65                 | 6.01                | 25.1       | 1070                                      | 0.3   | 2.6              | -88      |        |       |
| 1425 | 0.48                    | 2.56                           | 0.16             | 12.65                 | 6.01                | 25.1       | 1070                                      | 0.3   | 2.9              | -87      |        |       |
| 1428 | 0.48                    | 3.04                           | 0.16             | 12.65                 | 6.01                | 25.1       | 1070                                      | 0.3   | 3.1              | -88      | 5LT    |       |
|      |                         |                                |                  |                       |                     |            |   |   |                  |          | YELLOW |       |
|      |                         |                                |                  |                       |                     |            |   |   |                  |          | TURB   |       |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.04; 2" = 0.16; 3" = 0.37; 4" = 0.66; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal/FT): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.009; 1/2" = 0.010; 5/8" = 0.018  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

COLLECTED BY (PRINT) / AFFILIATION: **AN ARMOUR / ACC** SAMPLER(S) SIGNATURE(S): \_\_\_\_\_ SAMPLING INITIATED AT: **1429** SAMPLING ENDED AT: **NA**  
 PUMP OR TUBING PTH IN WELL (feet): **13.00** TUBING MATERIAL CODE: **T** FIELD-FILTERED: **Y** (N) FILTER SIZE: \_\_\_\_\_  
 LD DECONTAMINATION: PUMP **Y** (N) TUBING **Y** (N) (replaced) DUPLICATE: **Y** (N)

| SAMPLE CONTAINER SPECIFICATION |              |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|--------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| WPLE CODE                      | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| *                              | SEE          | SAMPLE        | 4-0-C  | AND                 | BOTTLE                        | ORDER    | WORKSHEET                       |                                       |                         |

REMARKS: Sheen Present: **YES (RO)**  
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

ES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWBZ05**      SAMPLE ID: \_\_\_\_\_      DATE: **2-21-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **3/8**      WELL SCREEN INTERVAL DEPTH: **10** feet to **20** feet      STATIC DEPTH TO WATER (feet): **10.10**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOC (ft NGVD): **121.01**      GROUNDWATER ELEVATION (ft NGVD): **110.91**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)  
 = **(20.00 - 10.10) feet** X **0.163** gallons/foot = **1.61** gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)  
 = **0.3** gallons + **(0.006** gallons/foot X **20.00** feet) + **0.05** gallons = **0.47** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      PURGING INITIATED AT: **1338**      PURGING ENDED AT: **1359**      TOTAL VOLUME PURGED (gallons): **3.36**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR  | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|--|------------------|----------|--------|------|
| 1349 | 1.76                    | <del>2.24</del> 2.24           | 0.16             | 10.44                 | 5.11                | 27.7       | 279                            | 0.5  | 9.1              | 64       |        |      |
| 1352 | 0.48                    | 2.72                           | 0.16             | 10.44                 | 5.13                | 27.7       | 280                            | 0.5  | 8.2              | 63       |        |      |
| 1355 | 0.48                    | 3.20                           | 0.16             | 10.45                 | 5.14                | 27.7       | 281                            | 0.5  | 8.6              | 63       |        |      |
| 1358 | 0.48                    | 3.68                           | 0.16             | 10.45                 | 5.15                | 27.6       | 282                            | 0.5  | 8.7              | 61       | 5.5    |      |
|      |                         |                                |                  |                       |                     |            |                                |  |                  |          | Yellow |      |
|      |                         |                                |                  |                       |                     |            |                                |  |                  |          | Turb   |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_      SAMPLING INITIATED AT: **1359**      SAMPLING ENDED AT: **NR**

PUMP OR TUBING DEPTH IN WELL (ft): **15.00**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y** (N)      FILTER SIZE: \_\_\_\_\_  
 Filtration Equipment Type: \_\_\_\_\_

FIELD DECONTAMINATION: PUMP **Y** (O)      TUBING **Y** (replaced)      DUPLICATE: **Y** (N)

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| *                              | SEE        | SAMPLE        | C-O-C  | AND                 | BOTTLE                        | ORDER    | WDAKSHEET                       |                                       |                         |

**REMARKS:**

Shen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

- NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units; Temperature: ± 0.2°C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

|                               |  |
|-------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> |
| WELL NO: <b>MWB-40S</b>       | SAMPLE ID: _____                       |
| DATE: <b>2-21-12</b>          |  |

### PURGING DATA

|  |   |   |  |  |
|--|---|---|--|--|
| WELL DIAMETER (Inches): <b>2</b>   | TUBING DIAMETER (Inches): <b>1.4</b>                    | WELL SCREEN INTERVAL DEPTH (feet): <b>8.5 (to 17.5)</b> | STATIC DEPTH TO WATER (feet): <b>10.40</b> | PURGE PUMP TYPE OR BALER: <b>PP</b>        |
| WELL ELEVATION TOG (ft NGVD): <b>NA</b>  |   | GROUNDWATER ELEVATION (ft NGVD): <b>NA</b>              |  |  |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>$18.52 \text{ feet} - 10.40 \text{ feet} \times 0.163 \text{ gallons/foot} = 1.32 \text{ gallons}$   |   |   |  |  |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>$0.0 \text{ gallons} + (0.002 \text{ gallons/foot} \times 18.52 \text{ feet}) + 0.05 \text{ gallons} = 0.16 \text{ gallons}$ |   |   |  |  |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>18.00</b>  | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>18.00</b> | PURGING INITIATED AT: <b>1308</b>                       | PURGING ENDED AT: <b>1328</b>              | TOTAL VOLUME PURGED (gallons): <b>2.94</b> |

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro units)<br>(microhm-cm or µS/cm) | DISSOLVED OXYGEN (micro units)<br>(mg/L or % saturation) | TURBIDITY (NTUs) | ORP (mV) | COLOR  | ODOUR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--|--|------------------|----------|--------|-------|
| 1318 | 1.40                    | 1.40                           | 0.14             | 10.48                 | 5.47                | 26.1       | 580  | 0.2  | 3.2              | -37      |        |       |
| 1321 | 0.42                    | 1.82                           | 0.14             | 10.49                 | 5.46                | 26.1       | 582  | 0.2  | 3.5              | -38      |        |       |
| 1324 | 0.42                    | 2.36                           | 0.14             | 10.49                 | 5.49                | 26.1       | 581  | 0.2  | 3.8              | -37      |        |       |
| 1327 | 0.42                    | 2.80                           | 0.14             | 10.49                 | 5.47                | 26.1       | 578  | 0.2  | 3.6              | -39      | Yellow |       |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.10; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

|   |   |                                    |                              |
|---|---|------------------------------------|------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>ACC</b>      | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i> | SAMPLING INITIATED AT: <b>1328</b> | SAMPLING ENDED AT: <b>NR</b> |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>18.00</b> | TUBING MATERIAL CODE: <b>PE</b>             | FIELD-FILTERED: <b>Y (N)</b>       | FILTER SIZE: _____           |
| ELD. DECONTAMINATION: PUMP <b>Y (N)</b>           | TUBING <b>Y (N) (pieces)</b>                | DUPLICATE: <b>Y (N)</b>            |                              |

| SAMPLE CONTAINER SPECIFICATION                   |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| AMPLE CODE                                       | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| <b>SEE SAMPLE LOG AND BOTTLE ORDER WORKSHEET</b> |            |               |        |                     |                               |          |                                 |                                       |                         |

REMARKS:

Shoen Present: **YES (NO)**

MATERIAL CODES: AG = Amber Glass; GG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: **TRAIL RIDGE** SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB-395** SAMPLE ID: \_\_\_\_\_ DATE: **2-6-72**

**PURGING DATA**

WELL DIAMETER (inches): **2** TUBING DIAMETER (inches): **1.4** WELL SCREEN INTERVAL DEPTH: **8.9** feet TO WATER (feet): **14.34** STATIC DEPTH TO WATER (feet): **14.34** PURGE PUMP TYPE OR BAILER: **PP**

WELL ELEVATION TOG (R NGVD): **NA** GROUNDWATER ELEVATION (R NGVD): **NA**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)  
 $= (18.90 \text{ feet} - 14.34 \text{ feet}) \times 0.163 \text{ gallons/foot} = 0.74 \text{ gallons}$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)  
 $= 0.0 \text{ gallons} + (0.0026 \text{ gallons/foot} \times 18.90 \text{ feet}) + 0.05 \text{ gallons} = 0.10 \text{ gallons}$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **18.00** FINAL PUMP OR TUBING DEPTH IN WELL (feet): **18.00** PURGING INITIATED AT: **1238** PURGING ENDED AT: **1258** TOTAL VOLUME PURGED (gallons): **2.00**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro units) umhos/cm or µS/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | DOOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---------------------------------------|--|------------------|----------|-------|------|
| 1248 | 1.00                    | 1.00                           | 0.10             | 14.52                 | 4.96                | 25.2       | 1290                                  | 0.2  | 1.6              | -39      |       |      |
| 1251 | 0.30                    | 1.30                           | 0.10             | 14.52                 | 4.96                | 25.1       | 1290                                  | 0.2  | 2.5              | -39      |       |      |
| 1254 | 0.30                    | 1.60                           | 0.10             | 14.52                 | 4.95                | 25.1       | 1280                                  | 0.0  | 2.9              | -39      |       |      |
| 1257 | 0.30                    | 1.90                           | 0.10             | 14.52                 | 4.95                | 25.1       | 1280                                  | 0.0  | 2.4              | -39      | NONE  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 1.5" = 0.10; 1.75" = 0.16; 2" = 0.25; 2.25" = 0.37; 2.5" = 0.55; 2.75" = 1.02; 3" = 1.47; 3.25" = 2.16; 3.5" = 3.15; 3.75" = 4.50; 4" = 6.30  
 TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0004; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: **DANNY ARMOUR / ACC** SAMPLER(S) SIGNATURE(S): \_\_\_\_\_ SAMPLING INITIATED AT: **1258** SAMPLING ENDED AT: **NR**

PUMP OR TUBING DEPTH IN WELL (feet): **18.00** TUBING MATERIAL CODE: **PE** FIELD-FILTERED: **Y (N)** FILTER SIZE: \_\_\_\_\_  
 µm Filtration Equipment Type: \_\_\_\_\_

FIELD DECONTAMINATION: PUMP **Y (N)** TUBING **Y (N)** DUPLICATE: **Y (N)**

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE D CODE                  | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
|                                |            |               |        |                     |                               |          |                                 |                                       |                         |
|                                |            |               |        |                     |                               |          |                                 |                                       |                         |
|                                |            |               |        |                     |                               |          |                                 |                                       |                         |
|                                |            |               |        |                     |                               |          |                                 |                                       |                         |

REMARKS:

Sheen Present: **YES (NO)**

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFP** = Reverse Flow Peristaltic Pump; **SM** = Siphon Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB34I**      SAMPLE ID: \_\_\_\_\_      DATE: **2-21-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **43.95** feet to **53.95** feet      STATIC DEPTH TO WATER (feet): **11.14**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOC (ft NGVD): **125.80**      GROUNDWATER ELEVATION (ft NGVD): **114.66**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)      = ( \_\_\_\_\_ ) feet - \_\_\_\_\_ feet X \_\_\_\_\_ gallons/foot = \_\_\_\_\_ gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)      = **0.3** gallons + (0.006 gallons/foot X **53.95** feet) + 0.05 gallons = **0.67** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **48.95**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **48.95**      PURGING INITIATED AT: **1202**      PURGING ENDED AT: **1228**      TOTAL VOLUME PURGED (gallons): **4.60**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---|---|------------------|----------|-------|------|
| 1218 | 2.30                    | 2.30                           | 0.23             | 11.20                 | 5.42                | 27.3       | 40  | 0.4   | 2.3              | 24       |       |      |
| 1221 | 0.69                    | 2.99                           | 0.23             | 11.20                 | 5.41                | 27.3       | 39  | 0.4   | 2.4              | 25       |       |      |
| 1224 | 0.69                    | 3.68                           | 0.23             | 11.20                 | 5.40                | 27.3       | 39  | 0.4   | 2.6              | 24       |       |      |
| 1229 | 0.69                    | 4.37                           | 0.23             | 11.20                 | 5.41                | 27.3       | 39  | 0.4   | 2.9              | 24       | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 1.5" = 0.10; 1.75" = 0.16; 2" = 0.25; 2.25" = 0.37; 2.5" = 0.50; 2.75" = 0.65; 3" = 1.02; 3.25" = 1.47; 3.5" = 2.00  
 TUBING INSIDE DIA. CAPACITY (Gal./ft): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.032  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_      SAMPLING INITIATED AT: **1228**      SAMPLING ENDED AT: **NR**

PUMP OR TUBING DEPTH IN WELL (feet): **48.95**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y (N)**      FILTER SIZE: \_\_\_\_\_ μm  
 Filtration Equipment Type: \_\_\_\_\_

ELD DECONTAMINATION: PUMP **Y (N)**      TUBING **Y (N)**      DUPLICATE: **Y (N)**

| SAMPLE CONTAINER SPECIFICATION |            |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     |                                 |                                       |                         |
| <b>*</b>                       | <b>SEE</b> | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDER</b> | <b>WDAKSHEET</b>                |                                       |                         |

REMARKS: **Shoen Present YES (NO)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units    Temperature: ± 0.2 °C    Specific Conductance: ± 5%    Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)    Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB343**      SAMPLE ID: \_\_\_\_\_      DATE: **2-21-22**

**PURGING DATA**

WELL DIAMETER (inches): **2**      TUBING DIAMETER (inches): **3/8**      WELL SCREEN INTERVAL DEPTH: **2.34** feet to **18.36** feet      STATIC DEPTH TO WATER (feet): **9.72**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOC (ft NGVD): **125.78**      GROUNDWATER ELEVATION (ft NGVD): **116.06**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)      = **(18.36 - 9.72) feet** X **0.1163 gallons/foot** = **1.41** gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)      = **0.3** gallons + **(0.006 gallons/foot X 18.36 feet)** + **0.05** gallons = **0.46** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **13.36**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **13.36**      PURGING INITIATED AT: **1139**      PURGING ENDED AT: **1159**      TOTAL VOLUME PURGED (gallons): **3.20**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>µmhos/cm or µS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---|---|------------------|----------|-------|------|
| 1149 | 1.60                    | 1.60                           | 0.16             | 11.48                 | 6.56                | 23.9       | 1530                                      | 0.4   | 3.9              | 28       |       |      |
| 1152 | 0.48                    | 2.08                           | 0.16             | 11.48                 | 6.56                | 23.9       | 1530                                      | 0.4   | 3.1              | 24       |       |      |
| 1155 | 0.48                    | 2.56                           | 0.16             | 11.48                 | 6.56                | 23.5       | 1530                                      | 0.3   | 2.8              | 22       |       |      |
| 1158 | 0.48                    | 3.04                           | 0.16             | 11.48                 | 6.52                | 23.5       | 1530                                      | 0.3   | 3.4              | 21       | SLT   |      |
|      |                         |                                |                  |                       |                     |            |   |   |                  |          | Flow  |      |
|      |                         |                                |                  |                       |                     |            |   |   |                  |          | Turb  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.10; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.80.  
 TUBING INSIDE DIA. CAPACITY (Gal/FT): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_      SAMPLING INITIATED AT: **1159**      SAMPLING ENDED AT: **NR**

PUMP OR TUBING DEPTH IN WELL (feet): **13.36**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y (N)**      FILTER SIZE: \_\_\_\_\_  
 µm      Filtration Equipment Type: \_\_\_\_\_

FIELD DECONTAMINATION: PUMP **Y (O)**      TUBING **Y (O) (replaced)**      DUPLICATE: **Y (M)**

| SAMPLE CONTAINER SPECIFICATION |              |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|--------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | # CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     |                                 |                                       |                         |
| <b>*</b>                       | <b>SEE</b>   | <b>SAMPLE</b> | <b>4-0-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDER</b> | <b>WORKSHEET</b>                |                                       |                         |

REMARKS: Sheen Present: YES **(RO)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS-2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 6 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB335**      SAMPLE ID: \_\_\_\_\_      DATE: **2-21-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **3/8**      WELL SCREEN INTERVAL DEPTH: **10.3 foot to 20.3 foot**      STATIC DEPTH TO WATER (feet): **10.84**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOC (ft NGVD): **125.90**      GROUNDWATER ELEVATION (ft NGVD): **115.06**

WELL VOLUME PURGE: 1 WELL VOLUME \* (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)  
 = **120.30** feet - **10.84** feet X **0.163** gallons/foot = **1.54** gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. \* PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)  
 = **0.3** gallons + **(0.006 gallons/foot X 20.30 feet) + 0.05** gallons = **0.47** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **15.30**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **15.30**      PURGING INITIATED AT: **1108**      PURGING ENDED AT: **1128**      TOTAL VOLUME PURGED (gallons): **3.20**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units) µmhos/cm or µS/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--|--|------------------|----------|-------|------|
| 1118 | 1.60                    | 1.60                           | 0.16             | 10.95                 | 5.78                | 22.2       | 196                                    | 0.4  | 2.3              | 34       |       |      |
| 1121 | 0.48                    | 2.08                           | 0.16             | 10.95                 | 5.78                | 22.2       | 193                                    | 0.4  | 2.7              | 35       |       |      |
| 1124 | 0.48                    | 2.56                           | 0.16             | 10.95                 | 5.78                | 22.3       | 190                                    | 0.4  | 3.1              | 33       |       |      |
| 1127 | 0.48                    | 3.04                           | 0.16             | 10.96                 | 5.77                | 22.3       | 188                                    | 0.4  | 3.4              | 31       | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.80  
 TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): *[Signature]*      SAMPLING INITIATED AT: **1128**      SAMPLING ENDED AT: **NR**

PUMP OR TUBING DEPTH IN WELL (feet): **15.30**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y** (N)      FILTER SIZE: \_\_\_\_\_  
 µm Filtration Equipment Type: \_\_\_\_\_

FIELD DECONTAMINATION: PUMP **Y** (N)      TUBING **Y** (N) (replaced)      DUPLICATE: **Y** (N)

| SAMPLE CONTAINER SPECIFICATION |              |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|--------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE ID CODE                 | # CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     |                                 |                                       |                         |
|                                | <b>* SEE</b> | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDER</b> | <b>WORKSHEET</b>                |                                       |                         |

REMARKS: Sheen Present: YES (NO)

MATERIAL CODES: AG = Amber Glass; GG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 92-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units    Temperature: ± 0.2 °C    Specific Conductance: ± 5%    Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)    Turbidity: all readings ≤ 20 NTU; optionally ± 6 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

|                               |  |
|-------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE, FL</b> |
| WELL NO: <b>MWB-351</b>       | SAMPLE ID: _____                       |
| DATE: <b>2-21-22</b>          |  |

## PURGING DATA

|  |                                       |  |  |
|--|---------------------------------------|--|--|
| WELL DIAMETER (Inches): <b>2</b>   | TUBING DIAMETER (Inches): <b>1.75</b> | WELL SCREEN INTERVAL DEPTH: <b>53.4</b> (feet) | STATIC DEPTH TO WATER (feet): <b>10.62</b> |
| WELL ELEVATION TOC (if NGVD): <b>NA</b>  |                                       | GROUNDWATER ELEVATION (if NGVD): <b>NA</b>     |  |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)                 |                                       |  |  |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable) |                                       |  |  |

|   |   |                                   |                               |  |
|---|---|-----------------------------------|-------------------------------|--|
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>58.40</b> | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>58.40</b> | PURGING INITIATED AT: <b>0935</b> | PURGING ENDED AT: <b>0955</b> | TOTAL VOLUME PURGED (gallons): <b>3.00</b> |
|---|---|-----------------------------------|-------------------------------|--|

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (Standard Units) | TEMP. (°C) | COND. (micro units or µS/cm) | DISSOLVED OXYGEN (micro units mg/L or % saturation) | TURBIDITY (NTU) | ORP (mV) | COLOR | GDOP |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|------------------------------|---|-----------------|----------|-------|------|
| 0945 | 1.50                    | 1.50                           | 0.15             | 11.14                 | 4.88                | 20.7       | 32                           | 0.3   | 2.4             | 127      |       |      |
| 0948 | 0.45                    | 1.95                           | 0.15             | 11.14                 | 4.85                | 20.7       | 32                           | 0.3   | 2.0             | 130      |       |      |
| 0951 | 0.45                    | 2.40                           | 0.15             | 11.14                 | 4.83                | 20.7       | 32                           | 0.3   | 2.6             | 132      |       |      |
| 0954 | 0.45                    | 2.85                           | 0.15             | 11.15                 | 4.83                | 20.8       | 33                           | 0.3   | 2.9             | 134      | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.18; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0003; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018  
 PURGING EQUIPMENT CODES: B = Bailor, BP = Bladder Pump, ESP = Electric Submersible Pump, PP = Peristaltic Pump, O = Other (Specify)

## SAMPLING DATA

|   |                          |                                    |                              |
|---|--------------------------|------------------------------------|------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DANNY ARMOUR / ACC</b> | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: <b>0955</b> | SAMPLING ENDED AT: <b>NR</b> |
|---|--------------------------|------------------------------------|------------------------------|

|   |                                 |                                    |                    |
|---|---------------------------------|------------------------------------|--------------------|
| PUMP OR TUBING DEPTH IN WELL (feet): <b>58.40</b> | TUBING MATERIAL CODE: <b>PE</b> | FIELD-FILTERED: <b>Y</b> (circled) | FILTER SIZE: _____ |
|---|---------------------------------|------------------------------------|--------------------|

|  |                           |                               |
|--|---------------------------|-------------------------------|
| FIELD DECONTAMINATION: PUMP <b>Y</b> (circled) | TUBING <b>Y</b> (circled) | DUPLICATE: <b>Y</b> (circled) |
|--|---------------------------|-------------------------------|

| SAMPLE CONTAINER SPECIFICATION |  |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|--|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE ID CODE                 | # CONTAINERS                                     | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| <b>(X)</b>                     | <b>SEE SAMPLE LOG AND BOTTLE ORDER WORKSHEET</b> |               |        |                     |                               |          |                                 |                                       |                         |

REMARKS: Sheen Present **YES** (circled)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION J)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater). Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB32I**      SAMPLE ID: \_\_\_\_\_

DATE: **2-21-22**  
**PURGING DATA**  
 WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **54.5** feet to **12.5** feet      STATIC DEPTH TO WATER (feet): **10.56**  
 WELL ELEVATION TOC (ft NGVD): **124.79**      GROUNDWATER ELEVATION (ft NGVD): **114.23**      PURGE PUMP TYPE OR BAILER: **BP**  
 WELL VOLUME PURGE: **1** WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 = ( **124.79** - **10.56** ) X \_\_\_\_\_ = \_\_\_\_\_ gallons

EQUIPMENT VOLUME PURGE: **1** EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = **0.3** gallons + ( **0.006** gallons/foot X **54.56** feet ) + **0.05** gallons = **0.91** gallons

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOUR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|--|------------------|----------|-------|-------|
| 1014 | 2.50                    | 2.50                           | 0.25             | 10.62                 | 5.18                | 21.8       | 39                             | 0.3  | 4.7              | -7       |       |       |
| 1017 | 0.75                    | 3.25                           | 0.25             | 10.62                 | 5.26                | 21.9       | 39                             | 0.3  | 4.6              | -8       |       |       |
| 1020 | 0.75                    | 4.00                           | 0.25             | 10.62                 | 5.27                | 21.9       | 39                             | 0.3  | 4.3              | -9       |       |       |
| 1023 | 0.75                    | 4.75                           | 0.25             | 10.62                 | 5.28                | 21.9       | 39                             | 0.3  | 4.6              | -10      | None  |       |

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **59.56**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **59.56**      PURGING INITIATED AT: **1004**      PURGING ENDED AT: **1024**      TOTAL VOLUME PURGED (gallons): **5.00**

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.10; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0004; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.009; 1/2" = 0.016; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**  
 SAMPLED BY (PRINT) / AFFILIATION: **AN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
 JUMP OR TUBING DEPTH IN WELL (feet): **59.56**      TUBING MATERIAL CODE: **T**      SAMPLING INITIATED AT: **1024**      SAMPLING ENDED AT: **NR**  
 FLD DECONTAMINATION: PUMP  Y      TUBING  Y (replaced)      FIELD-FILTERED:  Y (N)      FILTER SIZE: \_\_\_\_\_  
 FLD DECONTAMINATION: \_\_\_\_\_      TUBING \_\_\_\_\_      FLD DECONTAMINATION: \_\_\_\_\_      TUBING \_\_\_\_\_      FLD DECONTAMINATION: \_\_\_\_\_      TUBING \_\_\_\_\_

| SAMPLE CONTAINER SPECIFICATION |              |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|--------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| *                              | SEE          | SAMPLE        | C-O-C  | AND                 | BOTTLE                        | ORDER    | WORKSHEET                       |                                       |                         |

REMARKS:  
 Sheen Present: YES  (NO)  
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES: APP = Aher Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

RES: 1. The above do not constitute all of the information required by Chapter 62-180, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION J)  
 pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 6 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO.: **MWB323**      SAMPLE ID: \_\_\_\_\_

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      PURGING DATA      DATE: **8-21-22**  
 WELL SCREEN INTERVAL DEPTH: **9.9** feet to **19.9** feet      STATIC DEPTH TO WATER (feet): **9.48**  
 WELL ELEVATION TOC (ft NGVD): \_\_\_\_\_      GROUNDWATER ELEVATION (ft NGVD): **115.16**  
 WELL VOLUME PURGE: **124.64**      (only fill out if applicable)  
 (only fill out if applicable)      (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

EQUIPMENT VOLUME PURGE: **119.90**      (only fill out if applicable)  
 (only fill out if applicable)      1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = **0.3** gallons + (0.006 gallons/foot X **19.90** feet) + **0.05** gallons = **0.17** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **14.90**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **14.90**      PURGING INITIATED AT: **1038**      PURGING ENDED AT: **1059**      TOTAL VOLUME PURGED (gallons): **3.36**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro units) umhos/cm or µS/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---------------------------------------|--|------------------|----------|-------|------|
| 1049 | 1.76                    | 1.76                           | 0.16             | 10.06                 | 5.57                | 21.1       | 245                                   | 0.2  | 7.6              | 45       |       |      |
| 1052 | 0.48                    | 2.24                           | 0.16             | 10.07                 | 5.54                | 21.1       | 248                                   | 0.3  | 6.2              | 44       |       |      |
| 1055 | 0.48                    | 2.72                           | 0.16             | 10.07                 | 5.52                | 21.1       | 250                                   | 0.2  | 6.8              | 43       |       |      |
| 1058 | 0.48                    | 3.20                           | 0.16             | 10.07                 | 5.54                | 21.1       | 252                                   | 0.3  | 7.8              | 45       | LT    |      |
|      |                         |                                |                  |                       |                     |            |                                       |  |                  |          | TAN   |      |

WELL CAPACITY (Gallons Per Foot): 0.76" = 0.02; 1" = 0.04; 1.25" = 0.05; 2" = 0.10; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 7.2" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

APPLIED BY (PRINT) / AFFILIATION: **W ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
 IP OR TUBING TH IN WELL (feet): **14.90**      TUBING MATERIAL CODE: **T**      SAMPLING INITIATED AT: **1059**      SAMPLING ENDED AT: **NR**  
 DECONTAMINATION: PUMP **Y**       TUBING **Y**  (replaced)      FIELD-FILTERED: **Y**       FILTER SIZE: \_\_\_\_\_  
 Filtration Equipment Type: \_\_\_\_\_      DUPLICATE: **Y**

| SAMPLE CONTAINER SPECIFICATION |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
| CONTAINERS                     | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     |                                 |                                       |                         |
| <b>SEE</b>                     | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDER</b> | <b>WORKSHEET</b>                |                                       |                         |

REMARKS: **Sheen Present: YES (NO)**  
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units      Temperature: ± 0.2°C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB3I**      SAMPLE ID: \_\_\_\_\_

DATE: **2-21-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **52** feet to **62** feet      STATIC DEPTH TO WATER (feet): **15.34**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOG (ft NGVD): **151.86**      GROUNDWATER ELEVATION (ft NGVD): **136.02**

WELL VOLUME PURGE: 1 WELL VOLUME \* (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 = ( \_\_\_\_\_ ) (feet) X \_\_\_\_\_ (gallons/foot) = \_\_\_\_\_ gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. \* PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = **0.3** gallons + (**0.006** gallons/foot X **62.00** feet) + **0.05** gallons = **0.72** gallons

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (microhm/cm or µS/cm) | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|-----------------------------|--|------------------|----------|-------|------|
| 0831 | 2.50                    | 2.50                           | 0.25             | 16.77                 | 4.65                | 20.7       | 39                          | 0.7  | 1.6              | 48       |       |      |
| 0834 | 0.75                    | 3.25                           | 0.25             | 16.78                 | 4.64                | 20.7       | 38                          | 0.6  | 1.4              | 47       |       |      |
| 0837 | 0.75                    | 4.00                           | 0.25             | 16.78                 | 4.65                | 20.7       | 38                          | 0.7  | 1.7              | 48       |       |      |
| 0840 | 0.75                    | 4.75                           | 0.25             | 16.78                 | 4.63                | 20.7       | 38                          | 0.6  | 1.8              | 48       | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 1.5" = 0.10; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 8" = 2.80; 10" = 4.50; 12" = 7.20

TUBING INSIDE DIA. CAPACITY (Gal/FT): 1/8" = 0.0005; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.032

PURGING/EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_      SAMPLING INITIATED AT: **0841**      SAMPLING ENDED AT: **NA**

PUMP OR TUBING DEPTH IN WELL (feet): **57.00**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y** (M)      FILTER SIZE: \_\_\_\_\_

FIELD DECONTAMINATION: PUMP **Y** (M)      TUBING **Y** (M) (replaced)      DUPLICATE: **Y** (M)

| SAMPLE CODE | SAMPLE CONTAINER SPECIFICATION |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|-------------|--------------------------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
|             | CONTAINERS                     | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     |                                 |                                       |                         |
| <b>*</b>    | <b>SEE</b>                     | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDER</b> | <b>WPAK SHEET</b>               |                                       |                         |

REMARKS: **Shoen Present YES (NO)**

MATERIAL CODES: (Specify) AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212 SECTION 3)  
 pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200.2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE** SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWBZI** SAMPLE ID: \_\_\_\_\_

DATE: **2-21-22**  
 WELL DIAMETER (Inches): **2** TUBING DIAMETER (Inches): **5/8** PURGING DATA  
 WELL SCREEN INTERVAL DEPTH: **51.5** feet to **61.5** feet STATO DEPTH TO WATER (feet): **13.50**  
 WELL ELEVATION TOC (ft NGVD): **145.73** GROUNDWATER ELEVATION (ft NGVD): **132.23**  
 WELL VOLUME PURGE: **1** WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)

EQUIPMENT VOLUME PURGE: **1** EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **56.50** FINAL PUMP OR TUBING DEPTH IN WELL (feet): **56.50** PURGING INITIATED AT: **0651** PURGING ENDED AT: **0711**  
 = **0.3** gallons + (**0.006** gallons/foot X **61.50** feet) + **0.05** gallons = **0.72** gallons

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (mg/L or % saturation) | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|---|------------------|----------|-------|------|
| 0701 | 2.50                    | 2.50                           | 0.25             | 13.61                 | 4.68                | 19.7       | 39                             | 0.6                                     | 1.8              | 63       |       |      |
| 0704 | 0.75                    | 3.25                           | 0.25             | 13.61                 | 4.69                | 19.7       | 39                             | 0.6                                     | 2.3              | 63       |       |      |
| 0709 | 0.75                    | 4.00                           | 0.25             | 13.61                 | 4.70                | 19.7       | 39                             | 0.5                                     | 2.8              | 63       |       |      |
| 0710 | 0.75                    | 4.75                           | 0.25             | 13.62                 | 4.71                | 19.8       | 39                             | 0.5                                     | 2.6              | 63       | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 1.75" = 0.13; 2" = 0.18; 2.25" = 0.24; 2.5" = 0.31; 2.75" = 0.39; 3" = 0.47; 3.25" = 0.56; 3.5" = 0.65; 3.75" = 0.75; 4" = 0.85; 4.25" = 0.96; 4.5" = 1.07; 4.75" = 1.19; 5" = 1.32; 5.25" = 1.46; 5.5" = 1.60; 5.75" = 1.76; 6" = 1.92; 6.25" = 2.09; 6.5" = 2.27; 6.75" = 2.46; 7" = 2.66; 7.25" = 2.87; 7.5" = 3.09; 7.75" = 3.32; 8" = 3.56; 8.25" = 3.81; 8.5" = 4.07; 8.75" = 4.34; 9" = 4.62; 9.25" = 4.91; 9.5" = 5.21; 9.75" = 5.52; 10" = 5.84; 10.25" = 6.17; 10.5" = 6.52; 10.75" = 6.88; 11" = 7.25; 11.25" = 7.63; 11.5" = 8.02; 11.75" = 8.43; 12" = 8.85; 12.25" = 9.28; 12.5" = 9.72; 12.75" = 10.18; 13" = 10.65; 13.25" = 11.14; 13.5" = 11.62; 13.75" = 12.11; 14" = 12.62; 14.25" = 13.14; 14.5" = 13.68; 14.75" = 14.24; 15" = 14.81; 15.25" = 15.39; 15.5" = 16.07; 15.75" = 16.77; 16" = 17.49; 16.25" = 18.24; 16.5" = 18.81; 16.75" = 19.41; 17" = 20.04; 17.25" = 20.71; 17.5" = 21.40; 17.75" = 22.11; 18" = 22.84; 18.25" = 23.61; 18.5" = 24.19; 18.75" = 24.80; 19" = 25.44; 19.25" = 26.11; 19.5" = 26.84; 19.75" = 27.59; 20" = 28.36; 20.25" = 29.14; 20.5" = 29.81; 20.75" = 30.51; 21" = 31.24; 21.25" = 31.96; 21.5" = 32.73; 21.75" = 33.53; 22" = 34.36; 22.25" = 35.14; 22.5" = 35.81; 22.75" = 36.54; 23" = 37.29; 23.25" = 38.06; 23.5" = 38.74; 23.75" = 39.47; 24" = 40.24; 24.25" = 41.01; 24.5" = 41.71; 24.75" = 42.41; 25" = 43.16; 25.25" = 43.88; 25.5" = 44.67; 25.75" = 45.49; 26" = 46.34; 26.25" = 47.19; 26.5" = 48.00; 26.75" = 48.83; 27" = 49.69; 27.25" = 50.54; 27.5" = 51.37; 27.75" = 52.24; 28" = 53.16; 28.25" = 54.07; 28.5" = 54.96; 28.75" = 55.91; 29" = 56.84; 29.25" = 57.76; 29.5" = 58.67; 29.75" = 59.64; 30" = 60.59; 30.25" = 61.54; 30.5" = 62.46; 30.75" = 63.44; 31" = 64.39; 31.25" = 65.41; 31.5" = 66.40; 31.75" = 67.46; 32" = 68.49; 32.25" = 69.54; 32.5" = 70.69; 32.75" = 71.81; 33" = 73.00; 33.25" = 74.19; 33.5" = 75.64; 33.75" = 77.16; 34" = 78.75; 34.25" = 80.34; 34.5" = 81.59; 34.75" = 82.91; 35" = 84.31; 35.25" = 85.71; 35.5" = 86.59; 35.75" = 87.54; 36" = 88.49; 36.25" = 89.51; 36.5" = 90.54; 36.75" = 91.64; 37" = 92.79; 37.25" = 93.96; 37.5" = 95.34; 37.75" = 96.79; 38" = 98.24; 38.25" = 99.76; 38.5" = 100.81; 38.75" = 101.94; 39" = 103.16; 39.25" = 104.36; 39.5" = 105.84; 39.75" = 107.39; 40" = 109.00; 40.25" = 110.61; 40.5" = 111.89; 40.75" = 113.24; 41" = 114.66; 41.25" = 116.11; 41.5" = 117.54; 41.75" = 118.54; 42" = 119.61; 42.25" = 121.64; 42.5" = 122.81; 42.75" = 123.96; 43" = 125.19; 43.25" = 126.41; 43.5" = 127.89; 43.75" = 129.41; 44" = 130.96; 44.25" = 132.54; 44.5" = 133.71; 44.75" = 134.86; 45" = 136.09; 45.25" = 137.29; 45.5" = 138.74; 45.75" = 140.24; 46" = 141.79; 46.25" = 143.36; 46.5" = 144.54; 46.75" = 145.71; 47" = 146.96; 47.25" = 148.19; 47.5" = 149.64; 47.75" = 151.16; 48" = 152.71; 48.25" = 154.29; 48.5" = 155.54; 48.75" = 156.71; 49" = 157.96; 49.25" = 160.19; 49.5" = 161.54; 49.75" = 162.96; 50" = 164.41; 50.25" = 166.96; 50.5" = 168.41; 50.75" = 170.41; 51" = 171.96; 51.25" = 174.01; 51.5" = 175.54; 51.75" = 177.11; 52" = 178.74; 52.25" = 181.41; 52.5" = 182.81; 52.75" = 184.24; 53" = 185.71; 53.25" = 189.19; 53.5" = 190.64; 53.75" = 191.64; 54" = 192.71; 54.25" = 196.84; 54.5" = 198.29; 54.75" = 199.81; 55" = 201.41; 55.25" = 205.84; 55.5" = 207.39; 55.75" = 208.96; 56" = 210.16; 56.25" = 214.41; 56.5" = 215.96; 56.75" = 217.04; 57" = 218.96; 57.25" = 223.61; 57.5" = 225.16; 57.75" = 226.24; 58" = 228.31; 58.25" = 233.84; 58.5" = 235.39; 58.75" = 236.51; 59" = 239.71; 59.25" = 246.41; 59.5" = 247.96; 59.75" = 249.11; 60" = 252.54; 60.25" = 259.19; 60.5" = 260.74; 60.75" = 261.96; 61" = 265.16; 61.25" = 272.84; 61.5" = 274.41; 61.75" = 275.64; 62" = 279.24; 62.25" = 286.41; 62.5" = 288.01; 62.75" = 289.24; 63" = 293.16; 63.25" = 299.96; 63.5" = 301.61; 63.75" = 302.96; 64" = 308.16; 64.25" = 318.84; 64.5" = 320.41; 64.75" = 321.64; 65" = 326.41; 65.25" = 337.61; 65.5" = 339.24; 65.75" = 340.51; 66" = 346.54; 66.25" = 357.61; 66.5" = 359.24; 66.75" = 360.51; 67" = 367.16; 67.25" = 374.41; 67.5" = 376.01; 67.75" = 377.24; 68" = 384.41; 68.25" = 398.84; 68.5" = 400.41; 68.75" = 401.64; 69" = 409.24; 69.25" = 421.61; 69.5" = 423.24; 69.75" = 424.51; 70" = 433.16; 70.25" = 445.84; 70.5" = 447.41; 70.75" = 448.64; 71" = 458.16; 71.25" = 470.41; 71.5" = 472.01; 71.75" = 473.24; 72" = 483.71; 72.25" = 495.84; 72.5" = 497.41; 72.75" = 498.64; 73" = 509.24; 73.25" = 521.61; 73.5" = 523.24; 73.75" = 524.51; 74" = 536.16; 74.25" = 549.84; 74.5" = 551.41; 74.75" = 552.64; 75" = 565.16; 75.25" = 581.61; 75.5" = 583.24; 75.75" = 584.51; 76" = 598.16; 76.25" = 609.84; 76.5" = 611.41; 76.75" = 612.64; 77" = 626.41; 77.25" = 643.61; 77.5" = 645.24; 77.75" = 646.51; 78" = 659.24; 78.25" = 680.84; 78.5" = 682.41; 78.75" = 683.64; 79" = 697.16; 79.25" = 716.41; 79.5" = 718.01; 79.75" = 719.24; 80" = 731.16; 80.25" = 749.84; 80.5" = 751.41; 80.75" = 752.64; 81" = 765.16; 81.25" = 781.61; 81.5" = 783.24; 81.75" = 784.51; 82" = 798.16; 82.25" = 812.84; 82.5" = 814.41; 82.75" = 815.64; 83" = 831.16; 83.25" = 842.84; 83.5" = 844.41; 83.75" = 845.64; 84" = 859.24; 84.25" = 877.61; 84.5" = 879.24; 84.75" = 880.51; 85" = 897.16; 85.25" = 910.84; 85.5" = 912.41; 85.75" = 913.64; 86" = 931.16; 86.25" = 943.61; 86.5" = 945.24; 86.75" = 946.51; 87" = 960.16; 87.25" = 977.61; 87.5" = 979.24; 87.75" = 980.51; 88" = 999.24; 88.25" = 1010.84; 88.5" = 1012.41; 88.75" = 1013.64; 89" = 1048.16; 89.25" = 1043.61; 89.5" = 1045.24; 89.75" = 1046.51; 90" = 1087.16; 90.25" = 1083.61; 90.5" = 1085.24; 90.75" = 1086.51; 91" = 1126.16; 91.25" = 1093.61; 91.5" = 1095.24; 91.75" = 1096.51; 92" = 1165.16; 92.25" = 1100.84; 92.5" = 1102.41; 92.75" = 1103.64; 93" = 1204.16; 93.25" = 1107.61; 93.5" = 1109.24; 93.75" = 1110.51; 94" = 1243.16; 94.25" = 1114.84; 94.5" = 1116.41; 94.75" = 1117.64; 95" = 1282.16; 95.25" = 1121.61; 95.5" = 1123.24; 95.75" = 1124.51; 96" = 1321.16; 96.25" = 1128.84; 96.5" = 1130.41; 96.75" = 1131.64; 97" = 1360.16; 97.25" = 1135.61; 97.5" = 1137.24; 97.75" = 1138.51; 98" = 1409.24; 98.25" = 1143.61; 98.5" = 1145.24; 98.75" = 1146.51; 99" = 1458.16; 99.25" = 1150.84; 99.5" = 1152.41; 99.75" = 1153.64; 100" = 1507.16; 100.25" = 1157.61; 100.5" = 1159.24; 100.75" = 1160.51; 101" = 1556.16; 101.25" = 1164.84; 101.5" = 1166.41; 101.75" = 1167.64; 102" = 1605.16; 102.25" = 1171.61; 102.5" = 1173.24; 102.75" = 1174.51; 103" = 1654.16; 103.25" = 1178.84; 103.5" = 1180.41; 103.75" = 1181.64; 104" = 1703.16; 104.25" = 1185.61; 104.5" = 1187.24; 104.75" = 1188.51; 105" = 1752.16; 105.25" = 1192.84; 105.5" = 1194.41; 105.75" = 1195.64; 106" = 1801.16; 106.25" = 1199.61; 106.5" = 1201.24; 106.75" = 1202.51; 107" = 1850.16; 107.25" = 1206.84; 107.5" = 1208.41; 107.75" = 1209.64; 108" = 1909.24; 108.25" = 1213.61; 108.5" = 1215.24; 108.75" = 1216.51; 109" = 1968.16; 109.25" = 1220.84; 109.5" = 1222.41; 109.75" = 1223.64; 110" = 2027.16; 110.25" = 1227.61; 110.5" = 1229.24; 110.75" = 1230.51; 111" = 2086.16; 111.25" = 1234.84; 111.5" = 1236.41; 111.75" = 1237.64; 112" = 2145.16; 112.25" = 1241.61; 112.5" = 1243.24; 112.75" = 1244.51; 113" = 2204.16; 113.25" = 1248.84; 113.5" = 1250.41; 113.75" = 1251.64; 114" = 2263.16; 114.25" = 1255.61; 114.5" = 1257.24; 114.75" = 1258.51; 115" = 2322.16; 115.25" = 1262.84; 115.5" = 1259.41; 115.75" = 1260.64; 116" = 2381.16; 116.25" = 1269.61; 116.5" = 1265.24; 116.75" = 1266.51; 117" = 2440.16; 117.25" = 1276.84; 117.5" = 1271.41; 117.75" = 1272.64; 118" = 2509.24; 118.25" = 1283.61; 118.5" = 1277.24; 118.75" = 1278.51; 119" = 2568.16; 119.25" = 1290.84; 119.5" = 1282.41; 119.75" = 1283.64; 120" = 2627.16; 120.25" = 1297.61; 120.5" = 1288.01; 120.75" = 1289.24; 121" = 2686.16; 121.25" = 1304.84; 121.5" = 1293.24; 121.75" = 1294.51; 122" = 2745.16; 122.25" = 1311.61; 122.5" = 1298.41; 122.75" = 1299.64; 123" = 2804.16; 123.25" = 1318.84; 123.5" = 1303.61; 123.75" = 1300.84; 124" = 2863.16; 124.25" = 1325.61; 124.5" = 1308.84; 124.75" = 1306.04; 125" = 2922.16; 125.25" = 1332.84; 125.5" = 1314.01; 125.75" = 1311.24; 126" = 2981.16; 126.25" = 1339.61; 126.5" = 1319.24; 126.75" = 1316.41; 127" = 3040.16; 127.25" = 1346.84; 127.5" = 1324.41; 127.75" = 1321.64; 128" = 3109.24; 128.25" = 1353.61; 128.5" = 1329.61; 128.75" = 1326.84; 129" = 3168.16; 129.25" = 1360.84; 129.5" = 1334.84; 129.75" = 1332.04; 130" = 3227.16; 130.25" = 1367.61; 130.5" = 1340.01; 130.75" = 1337.24; 131" = 3286.16; 131.25" = 1374.84; 131.5" = 1345.24; 131.75" = 1342.41; 132" = 3345.16; 132.25" = 1381.61; 132.5" = 1350.41; 132.75" = 1347.64; 133" = 3404.16; 133.25" = 1388.84; 133.5" = 1355.61; 133.75" = 1352.84; 134" = 3463.16; 134.25" = 1395.61; 134.5" = 1360.84; 134.75" = 1358.04; 135" = 3522.16; 135.25" = 1402.84; 135.5" = 1366.01; 135.75" = 1363.24; 136" = 3581.16; 136.25" = 1409.61; 136.5" = 1371.24; 136.75" = 1368.41; 137" = 3640.16; 137.25" = 1416.84; 137.5" = 1376.41; 137.75" = 1373.64; 138" = 3709.24; 138.25" = 1423.61; 138.5" = 1381.61; 138.75" = 1378.84; 139" = 3768.16; 139.25" = 1430.84; 139.5" = 1386.84; 139.75" = 1384.04; 140" = 3827.16; 140.25" = 1437.61; 140.5" = 1392.01; 140.75" = 1389.24; 141" = 3886.16; 141.25" = 1444.84; 141.5" = 1397.24; 141.75" = 1394.41; 142" = 3945.16; 142.25" = 1451.61; 142.5" = 1402.41; 142.75" = 1399.64; 143" = 4004.16; 143.25" = 1458.84; 143.5" = 1407.61; 143.75" = 1404.84; 144" = 4063.16; 144.25" = 1465.61; 144.5" = 1412.84; 144.75" = 1410.04; 145" = 4122.16; 145.25" = 1472.84; 145.5" = 1418.01; 145.75" = 1415.24; 146" = 4181.16; 146.25" = 1479.61; 146.5" = 1423.24; 146.75" = 1420.41; 147" = 4240.16; 147.25" = 1486.84; 147.5" = 1428.41; 147.75" = 1425.64; 148" = 4309.24; 148.25" = 1493.61; 148.5" = 1433.61; 148.75" = 1430.84; 149" = 4368.16; 149.25" = 1500.84; 149.5" = 1438.84; 149.75" = 1436.04; 150" = 4427.16; 150.25" = 1507.61; 150.5" = 1444.01; 150.75" = 1441.24; 151" = 4486.16; 151.25" = 1514.84; 151.5" = 1449.24; 151.75" = 1446.41; 152" = 4545.16; 152.25" = 1521.61; 152.5" = 1454.41; 152.75" = 1451.64; 153" = 4604.16; 153.25" = 1528.84; 153.5" = 1459.61; 153.75" = 1456.84; 154" = 4663.16; 154.25" = 1535.61; 154.5" = 1464.84; 154.75" = 1462.04; 155" = 4722.16; 155.25" = 1542.84; 155.5" = 1470.01; 155.75" = 1467.24; 156" = 4781.16; 156.25" = 1549.61; 156.5" = 1475.24; 156.75" = 1472.41; 157" = 4840.16; 157.25" = 1556.84; 157.5" = 1480.41; 157.75" = 1477.64; 158" = 4909.24; 158.25" = 1563.61; 158.5" = 1485.61; 158.75" = 1482.84; 159" = 4968.16; 159.25" = 1570.84; 159.5" = 1490.84; 159.75" = 1488.04; 160" = 5027.16; 160.25" = 1577.61; 160.5" = 1496.01; 160.75" = 1493.24; 161" = 5086.16; 161.25" = 1584.84; 161.5" = 1501.24; 161.75" = 1498.41; 162" = 5145.16; 162.25" = 1591.61; 162.5" = 1506.41; 162.75" = 1503.64; 163" = 5204.16; 163.25" = 1598.84; 163.5" = 1511.61; 163.75" = 1508.84; 164" = 5263.16; 164.25" = 1605.61; 164.5" = 1516.84; 164.75" = 1514.04; 165" = 5322.16; 165.25" = 1612.84; 165.5" = 1522.01; 165.75" = 1519.24; 166" = 5381.16; 166.25" = 1619.61; 166.5" = 1527.24; 166.75" = 1524.41; 167" = 5440.16; 167.25" = 1626.84; 167.5" = 1532.41; 167.75" = 1529.64; 168" = 5509.24; 168.25" = 1633.61; 168.5" = 1537.61; 168.75" = 1534.84; 169" = 5568.16; 169.25" = 1640.84; 169.5" = 1542.84; 169.75" = 1540.04; 170" = 5627.16; 170.25" = 1647.61; 170.5" = 1548.01; 170.75" = 1545.24; 171" = 5686.16; 171.25" = 1654.84; 171.5" = 1553.24; 171.75" = 1550.41; 172" = 5745.16; 172.25" = 1661.61; 172.5" = 1558.41; 172.75" = 1555.64; 173" = 5804.16; 173.25" = 1668.84; 173.5" = 1563.61; 173.75" = 1560.84; 174" = 5863.16; 174.25" = 1675.61; 174.5" = 1568.84; 174.75" = 1566.04; 175" = 5922.16; 175.25" = 1682.84; 175.5" = 1574.01; 175.75" = 1571.24; 176" = 5981.16; 176.25" = 1689.

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB25**      SAMPLE ID: \_\_\_\_\_

DATE: **2-21-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **3/8**      WELL SCREEN INTERVAL DEPTH: **10** feet to **20** feet      STATIC DEPTH TO WATER (feet): **10.66**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOG (R NGVD): **146.64**      GROUNDWATER ELEVATION (R NGVD): **135.98**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)      = **120.00** feet - **10.66** feet X **0.163** gallons/foot = **1.52** gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)      = **0.3** gallons + (**0.0066** gallons/foot X **20.00** feet) + **0.05** gallons = **0.47** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      PURGING INITIATED AT: **0719**      PURGING ENDED AT: **0739**      TOTAL VOLUME PURGED (gallons): **3.20**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard Units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (micro units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|---|------------------|----------|-------|------|
| 0729 | 1.60                    | 1.60                           | 0.16             | 11.73                 | 5.06                | 19.4       | 37                             | 1.5   | 22.1             | 105      |       |      |
| 0732 | 0.48                    | 2.08                           | 0.16             | 11.73                 | 5.04                | 19.4       | 37                             | 1.5   | 20.3             | 107      |       |      |
| 0735 | 0.48                    | 2.56                           | 0.16             | 11.73                 | 5.03                | 19.4       | 38                             | 1.5   | 17.6             | 109      |       |      |
| 0738 | 0.48                    | 3.04                           | 0.16             | 11.73                 | 5.03                | 19.4       | 38                             | 1.5   | 19.9             | 108      | Drawn |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0004; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.018

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_      SAMPLING INITIATED AT: **0739**      SAMPLING ENDED AT: **NR**

PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: Y  N       FILTER SIZE: \_\_\_\_\_

FIELD DECONTAMINATION: PUMP Y  TUBING Y  (replaced)      DUPLICATE: Y  N       Filtration Equipment Type: \_\_\_\_\_

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| *                              | SEE        | SAMPLE        | C-O-C  | AND                 | BOTTLE                        | DRIPA    | WORKSHEET                       |                                       |                         |

REMARKS: **Shoen Present YES (R)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-180, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB33**      SAMPLE ID: \_\_\_\_\_

**PURGING DATA**      DATE: **2-21-22**  
 WELL DIAMETER (inches): **2**      TUBING DIAMETER (inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **10 feet to 20 feet**      STATIC DEPTH TO WATER (feet): **9.28**  
 WELL ELEVATION TOG (ft NGVD): **154.38**      GROUNDWATER ELEVATION (ft NGVD): **145.10**      PURGE PUMP TYPE OR BAILER: **BP**  
 WELL VOLUME PURGE: **1** WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 EQUIPMENT VOLUME PURGE: **1** EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = **0.3** gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = **0.47** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      PURGING INITIATED AT: **0751**      PURGING ENDED AT: **0811**      TOTAL VOLUME PURGED (gallons): **3.20**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (microhm/cm or µS/cm) | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOUR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|-----------------------------|--|------------------|----------|-------|-------|
| 0801 | 1.60                    | 1.60                           | 0.16             | 9.50                  | 4.58                | 18.6       | 62                          | 1.3  | 4.2              | 220      |       |       |
| 0804 | 0.48                    | 2.08                           | 0.16             | 9.51                  | 4.58                | 18.5       | 62                          | 1.3  | 4.2              | 218      |       |       |
| 0803 | 0.48                    | 2.56                           | 0.16             | 9.51                  | 4.59                | 18.5       | 62                          | 1.3  | 3.4              | 216      |       |       |
| 0810 | 0.48                    | 3.04                           | 0.16             | 9.51                  | 4.60                | 18.5       | 62                          | 1.3  | 3.6              | 217      | None  |       |

WELL CAPACITY (Gallons Per Foot): 0.78" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**  
 SAMPLED BY (PRINT) / AFFILIATION: **DON ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
 PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      TUBING MATERIAL CODE: **T**      SAMPLING INITIATED AT: **0811**      SAMPLING ENDED AT: **NR**  
 FIELD DECONTAMINATION: PUMP  Y      TUBING  Y (replaced)      FIELD-FILTERED: Y  (µm)      FILTER SIZE: \_\_\_\_\_  
 Filtration Equipment Type: \_\_\_\_\_      DUPLICATE: Y  (M)

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| *                              | SEE        | SAMPLE        | C-O-C  | AND                 | BOTTLE                        | ORDER    | WDAKSHEET                       |                                       |                         |

REMARKS: **Shoen Present YES (RD)**  
 MATERIAL CODES: (Specify) AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION J)  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200.2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: **TRAIL RIDGE**  
 WELL NO: **MWB-355**  
 SAMPLE ID: \_\_\_\_\_  
 SITE LOCATION: **JACKSONVILLE, FL**  
 DATE: **2-21-22**

**PURGING DATA**  
 WELL DIAMETER (Inches): **2** TUBING DIAMETER (Inches): **1.4** WELL SCREEN INTERVAL DEPTH: **2.5 feet to 17.5 feet** STATIC DEPTH TO WATER (feet): **8.17**  
 WELL ELEVATION TOC (if NGVD): **NA** GROUNDWATER ELEVATION (if NGVD): **NA** PURGE PUMP TYPE OR BARLER: **PP**  
 WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 =  $(17.50 \text{ feet} - 8.17 \text{ feet}) \times 0.163 \text{ gallons/foot} = 1.52 \text{ gallons}$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 =  $0.0 \text{ gallons} + (0.0026 \text{ gallons/foot} \times 17.50 \text{ feet}) + 0.05 \text{ gallons} = 0.10 \text{ gallons}$

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (Standard Units) | TEMP. (°C) | COND. (micro units) or µS/cm | DISSOLVED OXYGEN (micro units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|------------------------------|---|------------------|----------|-------|------|
| 0917 | 1.30                    | 1.30                           | 0.13             | 8.42                  | 5.00                | 18.9       | 30                           | 0.4   | 3.9              | 56       |       |      |
| 0920 | 0.39                    | 1.69                           | 0.13             | 8.42                  | 5.00                | 18.9       | 30                           | 0.4   | 3.3              | 54       |       |      |
| 0923 | 0.39                    | 2.08                           | 0.13             | 8.42                  | 5.00                | 18.9       | 30                           | 0.3   | 3.2              | 53       |       |      |
| 0926 | 0.39                    | 2.47                           | 0.13             | 8.42                  | 5.00                | 18.9       | 30                           | 0.3   | 3.7              | 52       | None  |      |

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **17.00** FINAL PUMP OR TUBING DEPTH IN WELL (feet): **17.00** PURGING INITIATED AT: **0905** PURGING ENDED AT: **0927** TOTAL VOLUME PURGED (gallons): **2.60**

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.10; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0000; 3/16" = 0.0014; 1/4" = 0.0020; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**  
 SAMPLED BY (PRINT) / AFFILIATION: **ADAM APPROVA / ACC**  
 SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
 PUMP OR TUBING DEPTH IN WELL (feet): **17.00** TUBING MATERIAL CODE: **PE**  
 SAMPLING INITIATED AT: **0927** SAMPLING ENDED AT: **NR**  
 FLO. DECONTAMINATION: PUMP **Y** TUBING **Y** (replacing) FIELD-FILTERED: **Y** (N) FILTER SIZE: \_\_\_\_\_  
 Filtration Equipment Type: \_\_\_\_\_

| SAMPLE CONTAINER SPECIFICATION |   |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|---|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS                                | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| 0                              | SEE SAMPLE LOG AND BOTTLE ORDER WORKSHEET |               |        |                     |                               |          |                                 |                                       |                         |

REMARKS: Sheen Present YES **NO**  
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

ES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

|                                 |  |                      |
|---------------------------------|--|----------------------|
| SITE NAME: <b>TRAIL RIDGE</b>   | SITE LOCATION: <b>JACKSONVILLE, FL</b> | DATE: <b>2-18-22</b> |
| WELL NO: <b>EQUIPMENT BLANK</b> | SAMPLE ID:                             |                      |

**PURGING DATA**

|  |  |  |   |  |                     |            |  |   |                  |          |       |      |
|--|--|--|---|--|---------------------|------------|--|---|------------------|----------|-------|------|
| WELL DIAMETER (Inches): <b>NA</b>  | TUBING DIAMETER (Inches): <b>NA</b>                  | WELL SCREEN INTERVAL DEPTH: <b>-</b> feet to <b>-</b> feet | STATIC DEPTH TO WATER (feet): <b>NA</b> | PURGE PUMP TYPE OR BAILER: <b>NA</b>     |                     |            |  |   |                  |          |       |      |
| WELL ELEVATION TOC (R NGVD): <b>NA</b>   |  | GROUNDWATER ELEVATION (R NGVD): <b>NA</b>                  |   |  |                     |            |  |   |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)   |  |  |   |  |                     |            |  |   |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)  |  |  |   |  |                     |            |  |   |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b> | PURGING INITIATED AT: <b>NA</b>                            | PURGING ENDED AT: <b>NA</b>             | TOTAL VOLUME PURGED (gallons): <b>NA</b> |                     |            |  |   |                  |          |       |      |
| TIME   | VOLUME PURGED (gallons)                              | CUMUL VOLUME PURGED (gallons)                              | PURGE RATE (gpm)                        | DEPTH TO WATER (feet)                    | pH (standard units) | TEMP. (°C) | COND. (micro units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1105   | NA   | NA   | NA                                      | NA                                       | 6.79                | 20.4       | 6  | 0.8   | 0.0              | 22       | None  |      |
| <small>WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.86; 5" = 1.02; 6" = 1.47; 12" = 5.88<br/>         TUBING INSIDE DIA. CAPACITY (Gal/Ft.): 1/8" = 0.0009; 3/16" = 0.0014; 1/4" = 0.0029; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018<br/>         PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)</small> |  |  |   |  |                     |            |  |   |                  |          |       |      |

**SAMPLING DATA**

|   |  |               |   |                     |                               |  |                                 |                                       |                         |
|---|--|---------------|---|---------------------|-------------------------------|--|---------------------------------|---------------------------------------|-------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / ACC</b>   |  |               | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i> |                     |                               | SAMPLING INITIATED AT: <b>1105</b>                           |                                 | SAMPLING ENDED AT: <b>NR</b>          |                         |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>NA</b>  |  |               | TUBING MATERIAL CODE: <b>NA</b>             |                     |                               | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |                                 | FILTER SIZE: _____ μm                 |                         |
| FIELD DECONTAMINATION: PUMP <b>Y</b> N <b>NA</b>  |  |               | TUBING <b>Y</b> N (replaced) <b>NA</b>      |                     |                               | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |                                 |                                       |                         |
| SAMPLE CONTAINER SPECIFICATION  |  |               |   | SAMPLE PRESERVATION |                               |  | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
| SAMPLE ID CODE  | # CONTAINERS                                       | MATERIAL CODE | VOLUME                                      | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH   |                                 |                                       |                         |
| <b>Ⓢ</b>  | <b>SEE SAMPLE L-0-6 AND BOTTLE ORDER WORKSHEET</b> |               |   |                     |                               |  |                                 |                                       |                         |
| REMARKS: <b>SHEET: NO EB COMPLETED USING D.I. H2O PROVIDED BY AEL LABS</b>  |  |               |   |                     |                               |  |                                 |                                       |                         |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  |  |               |   |                     |                               |  |                                 |                                       |                         |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Stow Method (Tubing Gravity Drain); O = Other (Specify) |  |               |   |                     |                               |  |                                 |                                       |                         |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units - Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)  
 Revision Date: February 12, 2009



# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWBIZI**      SAMPLE ID: \_\_\_\_\_

**PURGING DATA**      DATE: **2-18-22**  
 WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **3/8**      WELL SCREEN INTERVAL DEPTH: **6.5** feet to **31.5** feet      STATIC DEPTH TO WATER (feet): **10.67**  
 WELL ELEVATION TOG (ft NGVD): **124.62**      GROUNDWATER ELEVATION (ft NGVD): **113.95**      PURGE PUMP TYPE OR BAILER: **BP**  
 WELL VOLUME PURGE: **1** WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 EQUIPMENT VOLUME PURGE: **1** EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **66.50**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **66.50**      PURGING INITIATED AT: **0651**      PURGING ENDED AT: **0711**      TOTAL VOLUME PURGED (gallons): **5.40**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTU) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---|---|-----------------|----------|-------|------|
| 0701 | 2.70                    | 2.70                           | 0.27             | 10.79                 | 5.20                | 24.3       | 39  | 0.9   | 1.8             | 81       |       |      |
| 0704 | 0.81                    | 3.51                           | 0.27             | 10.79                 | 5.21                | 24.3       | 39  | 0.4   | 2.0             | 81       |       |      |
| 0708 | 0.21                    | 4.32                           | 0.27             | 10.79                 | 5.21                | 24.4       | 39  | 0.4   | 2.1             | 81       |       |      |
| 0710 | 0.81                    | 5.13                           | 0.27             | 10.79                 | 5.22                | 24.4       | 39  | 0.4   | 2.3             | 81       | NONE  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.66; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0009; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer, BP = Bladder Pump, ESP = Electric Submersible Pump, PP = Peristaltic Pump, O = Other (Specify)

**SAMPLING DATA**  
 SAMPLED BY (PRINT) / AFFILIATION: **DON ARMOJA / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
 PUMP OR TUBING DEPTH IN WELL (feet): **66.50**      TUBING MATERIAL CODE: **T**      SAMPLING INITIATED AT: **0711**      SAMPLING ENDED AT: **NR**  
 FIELD DECONTAMINATION: PUMP  Y      TUBING  Y (replaced)      FIELD-FILTERED: **Y** (M)      FILTER SIZE: \_\_\_\_\_  
 Filtration Equipment Type: \_\_\_\_\_      DUPLICATE: **Y** (M)

| SAMPLE CONTAINER SPECIFICATION |            |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (ml. per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|--|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (ml) | FINAL pH     |                                 |  |                         |
| <b>*</b>                       | <b>SEE</b> | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDER</b> | <b>WORKSHEET</b>                |  |                         |

REMARKS: **Shoen Present YES (NO)**  
 MATERIAL CODES: (Specify) **AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other**  
 SAMPLING EQUIPMENT CODES: **APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)**

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3):  
 pH: ± 0.2 units    Temperature: ± 0.2 °C    Specific Conductance: ± 5%    Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)    Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB29I**      SAMPLE ID: \_\_\_\_\_

DATE: **2-18-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **53.5 feet to 63.3 feet**      STATIC DEPTH TO WATER (feet): **10.44**

WELL ELEVATION TOC (ft NGVD): **138.08**      GROUNDWATER ELEVATION (ft NGVD): **127.64**      PURGE PUMP TYPE OR BAILER: **BP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 = ( **138.08 - 10.44** ) feet X **0.73** gallons/foot = **97.64** gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = **0.3** gallons + ( **0.006** gallons/foot X **63.50** feet ) + **0.05** gallons = **0.73** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **58.50**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **58.50**      PURGING INITIATED AT: **1011**      PURGING ENDED AT: **1031**      TOTAL VOLUME PURGED (gallons): **5.00**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (dissolved units) mg/L or % saturation | TURBIDITY (NTU) | ORP (mV) | COLOR | ODOUR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|---|-----------------|----------|-------|-------|
| 1021 | 2.50                    | 2.50                           | 0.25             | 10.53                 | 5.10                | 24.9       | 39                             | 0.3   | 8.1             | 43       |       |       |
| 1024 | 0.75                    | 3.25                           | 0.25             | 10.53                 | 5.09                | 25.0       | 40                             | 0.3   | 7.2             | 41       |       |       |
| 1027 | 0.75                    | 4.00                           | 0.25             | 10.54                 | 5.07                | 25.0       | 39                             | 0.3   | 7.5             | 38       |       |       |
| 1030 | 0.75                    | 4.75                           | 0.25             | 10.54                 | 5.06                | 25.0       | 39                             | 0.3   | 7.6             | 41       | NONE  |       |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.10; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: **JAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_

PUMP OR TUBING DEPTH IN WELL (feet): **58.50**      TUBING MATERIAL CODE: **T**      SAMPLING INITIATED AT: **1031**      SAMPLING ENDED AT: **NA**

FIELD DECONTAMINATION: PUMP  Y      TUBING  Y (replaced)      FIELD-FILTERED: Y  N      FILTER SIZE: \_\_\_\_\_

DUPLICATE:  Y       N

| SAMPLE CODE | # CONTAINERS | MATERIAL CODE | VOLUME | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|-------------|--------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
|             |              |               |        | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| * SEE       |              | SAMPLE        |        | C-O-C               | AND BOTTLE                    | ORDER    | WORKSHEET                       |                                       |                         |

REMARKS: **Shoen Present YES (NO)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Airtight Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Siphon Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB27I**      SAMPLE ID: \_\_\_\_\_

DATE: **2-18-22**  
 WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      PURGING DATA: **10.72**  
 WELL ELEVATION TOC (ft NGVD): **128.63**      WELL SCREEN INTERVAL DEPTH: **52.5** to **62.5**      STATIC DEPTH TO WATER (feet): **117.91**  
 WELL VOLUME PURGE: **1** WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)      \* (      (feet) X      (feet) X      gallons/foot =      gallons

EQUIPMENT VOLUME PURGE: **1** EQUIPMENT VOL. X PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)      \* **0.3** gallons + (**0.006** gallons/foot X **62.50** (feet) + **0.05** gallons = **0.73** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **57.50**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **57.50**      PURGING INITIATED AT: **0916**      PURGING ENDED AT: **0936**      TOTAL VOLUME PURGED (gallons): **5.00**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>µmhos/cm or µS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---|---|------------------|----------|-------|------|
| 0926 | 2.50                    | 2.50                           | 0.25             | 10.79                 | 5.49                | 22.2       | 46  | 0.3   | 4.8              | 4        |       |      |
| 0929 | 0.75                    | 3.25                           | 0.25             | 10.79                 | 5.48                | 22.2       | 47  | 0.3   | 4.1              | 4        |       |      |
| 0932 | 0.75                    | 4.00                           | 0.25             | 10.79                 | 5.49                | 22.2       | 47  | 0.3   | 4.5              | 3        |       |      |
| 0935 | 0.75                    | 4.75                           | 0.25             | 10.80                 | 5.49                | 22.1       | 47  | 0.3   | 4.3              | 3        | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.00  
 TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLED BY (PRINT) / AFFILIATION: **JAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): *[Signature]*      SAMPLING INITIATED AT: **0936**      SAMPLING ENDED AT: **NA**

UPL OR TUBING DEPTH IN WELL (feet): **57.50**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y** (N)      FILTER SIZE: \_\_\_\_\_  
 ELO DECONTAMINATION: PUMP **Y** (O)      TUBING **Y** (O) (replaced)      Filtration Equipment Type: \_\_\_\_\_

SAMPLE CONTAINER SPECIFICATION      SAMPLE PRESERVATION      INTENDED ANALYSIS AND/OR METHOD      SAMPLE PUMP FLOW RATE (mL per minute)      SAMPLING EQUIPMENT CODE      DUPLICATE: **Y** (O)

| AMPLE CODE | CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|------------|------------|---------------|--------------|-------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
| <b>*</b>   | <b>SEE</b> | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>        | <b>BOTTLE</b>                 | <b>ORDER</b> | <b>WPAKSHEET</b>                |                                       |                         |

REMARKS: **Shed Present YES (NO)**

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailor; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

YES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB3I**      SAMPLE ID: \_\_\_\_\_

DATE: **2-18-22**

**PURGING DATA**  
 WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **58.4** feet to **60.4** feet      STATIC DEPTH TO WATER (feet): **18.79**  
 WELL ELEVATION TOC (ft NGVD): **125.98**      GROUNDWATER ELEVATION (ft NGVD): **107.19**      PURGE PUMP TYPE OR BAILER: **BP**  
 WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>55.40</b> |                         | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>55.40</b> |                  | PURGING INITIATED AT: <b>0849</b> |                     | PURGING ENDED AT: <b>0907</b> |                             | TOTAL VOLUME PURGED (gallons): <b>4.60</b>           |                  |          |       |       |
|---|-------------------------|---|------------------|-----------------------------------|---------------------|-------------------------------|-----------------------------|--|------------------|----------|-------|-------|
| TIME  | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons)                          | PURGE RATE (gpm) | DEPTH TO WATER (feet)             | pH (standard units) | TEMP. (°C)                    | COND. (microhm/cm or µS/cm) | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOUR |
| 0857  | 2.40                    | 2.40  | 0.24             | 19.25                             | 5.23                | 26.8                          | 35                          | 0.2  | 1.3              | 39       |       |       |
| 0900  | 0.72                    | 3.12  | 0.24             | 19.25                             | 5.21                | 26.9                          | 35                          | 0.3  | 1.9              | 39       |       |       |
| 0903  | 0.72                    | 3.84  | 0.24             | 19.25                             | 5.20                | 26.9                          | 35                          | 0.3  | 1.5              | 39       |       |       |
| 0906  | 0.72                    | 4.56  | 0.24             | 19.25                             | 5.20                | 26.9                          | 35                          | 0.2  | 1.7              | 39       | None  |       |

WELL CAPACITY (Gallons Per Foot): 0.76" = 0.02; 1" = 0.04; 1.25" = 0.06; 1.5" = 0.10; 1.75" = 0.16; 2" = 0.25; 2.25" = 0.37; 2.5" = 0.50; 2.75" = 0.66; 3" = 0.83; 3.25" = 1.00; 3.5" = 1.18; 3.75" = 1.36; 4" = 1.54; 4.25" = 1.72; 4.5" = 1.90; 4.75" = 2.08; 5" = 2.26; 5.25" = 2.44; 5.5" = 2.62; 5.75" = 2.80; 6" = 2.98; 6.25" = 3.16; 6.5" = 3.34; 6.75" = 3.52; 7" = 3.70; 7.25" = 3.88; 7.5" = 4.06; 7.75" = 4.24; 8" = 4.42; 8.25" = 4.60; 8.5" = 4.78; 8.75" = 4.96; 9" = 5.14; 9.25" = 5.32; 9.5" = 5.50; 9.75" = 5.68; 10" = 5.86

PURGING EQUIPMENT CODES: B = Bailor, BP = Bladder Pump, ESP = Electric Submersible Pump, PP = Peristaltic Pump, O = Other (Specify)

**SAMPLING DATA**  
 SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
 PUMP OR TUBING DEPTH IN WELL (feet): **55.40**      TUBING MATERIAL CODE: **T**      SAMPLING INITIATED AT: **0907**      SAMPLING ENDED AT: **NR**  
 FIELD DECONTAMINATION: PUMP       TUBING  (replaced)      FIELD FILTERED:       FILTER SIZE: \_\_\_\_\_  
 Filtration Equipment Type: \_\_\_\_\_      DUPLICATE:

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| *                              | SEE        | SAMPLE        | C-O-C  | AND                 | BOTTLE                        | DRQA     | WDAKSHEET                       |                                       |                         |

REMARKS: **Shen Present YES (NO)**  
 MATERIAL CODES: AG = Amber Glass; GG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 6 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB295**      SAMPLE ID: \_\_\_\_\_

DATE: **2-18-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **10 feet to 20 feet**      STATIC DEPTH TO WATER (feet): **8.78**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOC (ft NGVD): **138.02**      GROUNDWATER ELEVATION (ft NGVD): **129.24**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 = ( \_\_\_\_\_ feet - \_\_\_\_\_ feet ) X \_\_\_\_\_ gallons/foot = \_\_\_\_\_ gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = **0.3 gallons** + ( **0.006 gallons/foot** X **20.00 feet** ) + **0.05 gallons** = **0.47 gallons**

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      PURGING INITIATED AT: **1039**      PURGING ENDED AT: **1059**      TOTAL VOLUME PURGED (gallons): **3.20**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro units) μmhos/cm @ 25°C | DISSOLVED OXYGEN (micro units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|-------------------------------------|---|------------------|----------|-------|------|
| 1049 | 1.60                    | 1.60                           | 0.16             | 8.89                  | 4.99                | 19.7       | 102                                 | 0.3   | 1.9              | 98       |       |      |
| 1052 | 0.48                    | 2.08                           | 0.16             | 8.89                  | 4.94                | 19.7       | 102                                 | 0.3   | 2.2              | 95       |       |      |
| 1055 | 0.48                    | 2.56                           | 0.16             | 8.90                  | 4.96                | 19.7       | 102                                 | 0.3   | 1.8              | 91       |       |      |
| 1058 | 0.48                    | 3.04                           | 0.16             | 8.90                  | 4.94                | 19.7       | 102                                 | 0.3   | 2.0              | 89       |       | NONE |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 1.5" = 0.10; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 8" = 2.68  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_

PUMP OR TUBING DEPTH IN WELL (feet): **15.00**      TUBING MATERIAL CODE: **T**      SAMPLING INITIATED AT: **1059**      SAMPLING ENDED AT: **NR**

FIELD DECONTAMINATION: PUMP  CO      TUBING  (replaced)      FIELD-FILTERED:  **Y**      FILTER SIZE: \_\_\_\_\_

μm Filtration Equipment Type: \_\_\_\_\_      DUPLICATE:  **Y**      **(M)**

| SAMPLE CONTAINER SPECIFICATION |            |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     |                                 |                                       |                         |
| <b>*</b>                       | <b>SEE</b> | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDEA</b> | <b>WDK SHEET</b>                |                                       |                         |

REMARKS: **Shen Present YES (NO)**

MATERIAL CODES: (Specify) **AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other**

SAMPLING EQUIPMENT CODES: **APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)**

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB275**      SAMPLE ID: \_\_\_\_\_

DATE: **2-18-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **5.5** feet to **15.5** feet      STATIC DEPTH TO WATER (feet): **8.78**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOC (R.N.GVD): **128.42**      GROUNDWATER ELEVATION (R.N.GVD): **119.69**

WELL VOLUME PURGE:  $1 \text{ WELL VOLUME} = (\text{TOTAL WELL DEPTH} - \text{STATIC DEPTH TO WATER}) \times \text{WELL CAPACITY}$   
 (only fill out if applicable)       $1 (15.50 \text{ feet} - 8.78 \text{ feet}) \times 0.163 \text{ gallons/foot} = 1.10 \text{ gallons}$

EQUIPMENT VOLUME PURGE:  $1 \text{ EQUIPMENT VOL.} = \text{PUMP VOLUME} + (\text{TUBING CAPACITY} \times \text{TUBING LENGTH}) + \text{FLOW CELL VOLUME}$   
 (only fill out if applicable)       $0.3 \text{ gallons} + (0.006 \text{ gallons/foot} \times 15.50 \text{ feet}) + 0.05 \text{ gallons} = 0.14 \text{ gallons}$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **13.50**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **13.50**      PURGING INITIATED AT: **0943**      PURGING ENDED AT: **1003**      TOTAL VOLUME PURGED (gallons): **3.00**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR        |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---|---|------------------|----------|-------|-------------|
| 0953 | 1.50                    | 1.50                           | 0.15             | 9.00                  | 5.80                | 20.3       | 363                                       | 0.4   | 5.9              | 35       |       |             |
| 0956 | 0.45                    | 1.95                           | 0.15             | 9.00                  | 5.79                | 20.4       | 363                                       | 0.4   | 5.4              | 33       |       |             |
| 0959 | 0.45                    | 2.40                           | 0.15             | 9.00                  | 5.79                | 20.4       | 363                                       | 0.4   | 5.8              | 31       |       |             |
| 1002 | 0.45                    | 2.85                           | 0.15             | 9.00                  | 5.79                | 20.4       | 362                                       | 0.4   | 5.7              | 30       | 5-T   | Yellow tint |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0009; 3/16" = 0.0014; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): *[Signature]*      SAMPLING INITIATED AT: **1003**      SAMPLING ENDED AT: **NR**

PUMP OR TUBING DEPTH IN WELL (feet): **13.50**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y** (N)      FILTER SIZE: \_\_\_\_\_

FIELD DECONTAMINATION: PUMP **Y** (O)      TUBING **Y** (D) (replaced)      DUPLICATE: **Y** (N)

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| *                              | SEE        | SAMPLE        | C-O-C  | AND                 | BOTTLE                        | ORDER    | WORKSHEET                       |                                       |                         |

REMARKS: **Shoen Present: YES (NO)**

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailor; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. **STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)**  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200.2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB133**      SAMPLE ID: \_\_\_\_\_

DATE: **2-18-22**  
**PURGING DATA**  
 WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **3/8**      WELL SCREEN INTERVAL DEPTH: **16.56 feet to 26.56 feet**      STATIC DEPTH TO WATER (feet): **12.69**  
 WELL ELEVATION TOC (ft NGVD): \_\_\_\_\_      GROUNDWATER ELEVATION (ft NGVD): **113.37**      PURGE PUMP TYPE OR BAILER: **BP**  
 WELL VOLUME PURGE: **126.06**      WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 EQUIPMENT VOLUME PURGE: **0.3**      EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **21.56**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **21.56**      PURGING INITIATED AT: **0818**      PURGING ENDED AT: **0838**      TOTAL VOLUME PURGED (gallons): **3.60**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units) µmhos/cm or µS/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR        |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--|--|------------------|----------|-------|-------------|
| 0828 | 1.80                    | 1.80                           | 0.18             | 13.19                 | 5.96                | 22.7       | 433                                    | 1.4  | 8.8              | 57       |       |             |
| 0831 | 0.54                    | 2.34                           | 0.18             | 13.20                 | 6.00                | 22.7       | 430                                    | 1.3  | 8.2              | 56       |       |             |
| 0834 | 0.54                    | 2.88                           | 0.18             | 13.20                 | 5.97                | 22.7       | 429                                    | 1.3  | 6.5              | 56       |       |             |
| 0837 | 0.54                    | 3.42                           | 0.18             | 13.20                 | 5.98                | 22.7       | 429                                    | 1.3  | 7.5              | 55       | 50    | Yellow tint |

WELL CAPACITY (Gallons Per Foot): 0.78" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.10; 3" = 0.17; 4" = 0.25; 5" = 0.37; 6" = 0.50; 8" = 0.83; 10" = 1.25; 12" = 1.88  
 TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.031  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**  
 SAMPLED BY (PRINT) / AFFILIATION: **AN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
 IMP OR TUBING DEPTH IN WELL (feet): **21.56**      TUBING MATERIAL CODE: **T**      SAMPLING INITIATED AT: **0838**      SAMPLING ENDED AT: **NR**  
 FLD DECONTAMINATION: PUMP       TUBING  (replaced)      FIELD-FILTERED:       FILTER SIZE: \_\_\_\_\_  
 Filtration Equipment Type: \_\_\_\_\_      DUPLICATE:

| SAMPLE CODE | SAMPLE CONTAINER SPECIFICATION |               | SAMPLE PRESERVATION |                   |                               | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|-------------|--------------------------------|---------------|---------------------|-------------------|-------------------------------|---------------------------------|---------------------------------------|-------------------------|
|             | CONTAINERS                     | MATERIAL CODE | VOLUME              | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) |                                 |                                       |                         |
| <b>*</b>    | <b>SEE</b>                     | <b>SAMPLE</b> | <b>6-0-0</b>        | <b>AND BOTTLE</b> | <b>ORDER</b>                  | <b>WORKSHEET</b>                |                                       |                         |

REMARKS:  
 Sheen Present: YES  (NO)  
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 6 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MX1B123**      SAMPLE ID: \_\_\_\_\_

**PURGING DATA**      DATE: **2-18-22**  
 WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **14.5 feet to 24.5 feet**      STATIC DEPTH TO WATER (feet): **11.24**  
 WELL ELEVATION TOC (ft NGVD): \_\_\_\_\_      GROUNDWATER ELEVATION (ft NGVD): **113.39**      PURGE PUMP TYPE OR BAILER: **BP**  
 WELL VOLUME PURGE: **124.63**      (only fill out if applicable)  
 EQUIPMENT VOLUME PURGE: **0.3**      (only fill out if applicable)

| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b> |                         | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b> |                  | PURGING INITIATED AT: <b>0739</b> |                     | PURGING ENDED AT: <b>0739</b> |  | TOTAL VOLUME PURGED (gallons): <b>0.5</b>            |                  |          |       |        |
|---|-------------------------|---|------------------|-----------------------------------|---------------------|-------------------------------|--|--|------------------|----------|-------|--------|
| TIME  | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons)                          | PURGE RATE (gpm) | DEPTH TO WATER (feet)             | pH (standard units) | TEMP. (°C)                    | COND. (Circle units) µmhos/cm or µS/cm | DISSOLVED OXYGEN (Circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOUR  |
| 0739  | 1.70                    | 1.70  | 0.17             | 12.64                             | 6.08                | 22.4                          | 270                                    | 1.2  | 3.0              | 70       |       |        |
| 0732  | 0.51                    | 2.21  | 0.17             | 12.65                             | 6.07                | 22.4                          | 271                                    | 1.2  | 3.3              | 71       |       |        |
| 0735  | 0.51                    | 2.72  | 0.17             | 12.65                             | 6.10                | 22.3                          | 271                                    | 1.2  | 3.5              | 73       |       |        |
| 0738  | 0.51                    | 3.23  | 0.17             | 12.65                             | 6.07                | 22.3                          | 271                                    | 1.2  | 3.7              | 74       | OUT   | YELLOW |
|   |                         |   |                  |                                   |                     |                               |  |  |                  |          |       | TINT   |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.80  
 TUBING INSIDE DIA. CAPACITY (Gal./ft): 1/8" = 0.0009; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor, BP = Bladder Pump, ESP = Electric Submersible Pump, PP = Peristaltic Pump, O = Other (Specify)

**SAMPLING DATA**  
 SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
 PUMP OR TUBING DEPTH IN WELL (feet): **19.50**      TUBING MATERIAL CODE: **T**      SAMPLING INITIATED AT: **0739**      SAMPLING ENDED AT: **NR**  
 FIELD DECONTAMINATION: PUMP **Y**      TUBING **Y** (replaced)      FIELD-FILTERED: **Y** (H)      FILTER SIZE: \_\_\_\_\_  
 Duplication Equipment Type: \_\_\_\_\_      DUPLICATE: **Y** (M)

| SAMPLE CONTAINER SPECIFICATION |            |               |              | SAMPLE PRESERVATION |                               |              | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------------|---------------------|-------------------------------|--------------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE CODE                    | CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH     |                                 |                                       |                         |
| <b>*</b>                       | <b>SEE</b> | <b>SAMPLE</b> | <b>C-O-C</b> | <b>AND</b>          | <b>BOTTLE</b>                 | <b>ORDEA</b> | <b>WDASHEET</b>                 |                                       |                         |

REMARKS: **Sheen Present: YES (RD)**  
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING EQUIPMENT CODES: APP = Air Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-180, F.A.C.  
 2. **STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)**  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWBZ25**      SAMPLE ID: \_\_\_\_\_

DATE: **2-18-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **5/8**      WELL SCREEN INTERVAL DEPTH: **16** feet to **26** feet      STATIC DEPTH TO WATER (feet): **12.59**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOG (R.N.GVD): **126.92**      GROUNDWATER ELEVATION (R.N.GVD): **114.38**

WELL VOLUME PURGE: 1 WELL VOLUME \* (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 = (      feet -      feet) X      gallons/foot =      gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = **0.3** gallons + (**0.006** gallons/foot X **26.00** feet) + **0.05** gallons = **0.51** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **21.00**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **21.00**      PURGING INITIATED AT: **0750**      PURGING ENDED AT: **0810**      TOTAL VOLUME PURGED (gallons): **3.60**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (micro units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR       | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|---|------------------|----------|-------------|------|
| 0800 | 1.80                    | 1.80                           | 0.18             | 12.39                 | 6.23                | 22.7       | 733                            | 0.2   | 1.3              | 40       |             |      |
| 0803 | 0.54                    | 2.34                           | 0.18             | 12.79                 | 6.24                | 22.7       | 732                            | 0.2   | 1.9              | 40       |             |      |
| 0806 | 0.54                    | 2.88                           | 0.18             | 12.80                 | 6.24                | 22.7       | 732                            | 0.2   | 2.2              | 40       |             |      |
| 0809 | 0.54                    | 3.42                           | 0.18             | 12.80                 | 6.24                | 22.7       | 731                            | 0.2   | 2.8              | 39       | SLT         |      |
|      |                         |                                |                  |                       |                     |            |                                |   |                  |          | Yellow tint |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.68  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0003; 3/16" = 0.0014; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.018  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: **DAN ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): *[Signature]*      SAMPLING INITIATED AT: **0810**      SAMPLING ENDED AT: **NR**

PUMP OR TUBING DEPTH IN WELL (feet): **21.00**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y** (N)      FILTER SIZE: \_\_\_\_\_

FIELD DECONTAMINATION: PUMP **Y** (N)      TUBING **Y** (replaced)      DUPLICATE: **Y** (N)

| SAMPLE CONTAINER SPECIFICATION |            |               |        | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|------------|---------------|--------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| SAMPLE D.C. CODE               | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| *                              | SEE        | SAMPLE        | C-O-C  | AND                 | BOTTLE                        | ORDER    | WORKSHEET                       |                                       |                         |

REMARKS: **Shoen Present YES (NO)**

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-180, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3):  
 pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009



## Daily Instrument Calibration Log

SITE: TRAIL RIDGE  
TECHNICIAN: DANNY ARMOUR

WATER LEVEL: SOLINST  
WATER LEVEL S/N: 377053

INSTRUMENT S/N: JYDPKR25  
INSTRUMENT TYPE: HORRIBA  
CAL. SOLUTIONS/S: ID: MULTI LOT #: 21150206 EXP. DATE: MAY 2022  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_  
ID: \_\_\_\_\_ LOT #: \_\_\_\_\_ EXP. DATE: \_\_\_\_\_

Calibration Date: 3-24-22

RDO: 100% sat. = 100%

PH: 4.00 = AUTO 7.00 = AUTO 10.00 = AUTO

CONDUCTIVITY: 4.49 (std) = 4.50 (std)

ORP (mV) AUTO

Calibration Date: \_\_\_\_\_

RDO: 100% sat. = \_\_\_\_\_

PH: 4.00 = \_\_\_\_\_ 7.00 = \_\_\_\_\_ 10.00 = \_\_\_\_\_

CONDUCTIVITY: \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Calibration Date: \_\_\_\_\_

RDO: 100% sat. = \_\_\_\_\_

PH: 4.00 = \_\_\_\_\_ 7.00 = \_\_\_\_\_ 10.00 = \_\_\_\_\_

CONDUCTIVITY: \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Calibration Date: \_\_\_\_\_

RDO: 100% sat. = \_\_\_\_\_

PH: 4.00 = \_\_\_\_\_ 7.00 = \_\_\_\_\_ 10.00 = \_\_\_\_\_

CONDUCTIVITY: \_\_\_\_\_

ORP (mV) \_\_\_\_\_

Calibration Date: \_\_\_\_\_

RDO: 100% sat. = \_\_\_\_\_

PH: 4.00 = \_\_\_\_\_ 7.00 = \_\_\_\_\_ 10.00 = \_\_\_\_\_

CONDUCTIVITY: \_\_\_\_\_

ORP (mV) \_\_\_\_\_


**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

|                               |                                       |
|-------------------------------|---------------------------------------|
| SITE NAME: <b>TRAIL RIDGE</b> | SITE LOCATION: <b>JACKSONVILLE FL</b> |
| WELL NO: <b>MWB-125</b>       | SAMPLE ID: _____ DATE: <b>3-24-22</b> |

**PURGING DATA**

|   |   |   |   |  |                     |            |  |  |                  |          |        |      |
|---|---|---|---|--|---------------------|------------|--|--|------------------|----------|--------|------|
| WELL DIAMETER (Inches): <b>2</b>  | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>14.5 feet to 24.5 feet</b> | STATIC DEPTH TO WATER (feet): <b>9.42</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |  |  |                  |          |        |      |
| WELL ELEVATION TOC (ft NGVD): <b>124.63</b>   |   | GROUNDWATER ELEVATION (ft NGVD): <b>115.21</b>            |   |  |                     |            |  |  |                  |          |        |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= ( _____ feet - _____ feet ) X _____ gallons/foot = _____ gallons  |   |   |   |  |                     |            |  |  |                  |          |        |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.2 gallons + (0.006 gallons/foot X 24.50 feet) + 0.05 gallons = 0.5 gallons</b>   |   |   |   |  |                     |            |  |  |                  |          |        |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b>   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b> | PURGING INITIATED AT: <b>0808</b>                         | PURGING ENDED AT: <b>0828</b>             | TOTAL VOLUME PURGED (gallons): <b>3.40</b> |                     |            |  |  |                  |          |        |      |
| TIME  | VOLUME PURGED (gallons)                                 | CUMUL VOLUME PURGED (gallons)                             | PURGE RATE (gpm)                          | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$ | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR  | ODOR |
| 0818  | 1.70  | 1.70  | 0.17                                      | 10.85                                      | 5.84                | 20.5       | 332  | 0.8  | 3.8              | 29       |        |      |
| 0821  | 0.51  | 2.21  | 0.17                                      | 10.85                                      | 5.81                | 20.4       | 331  | 0.7  | 4.1              | 32       |        |      |
| 0824  | 0.51  | 2.72  | 0.17                                      | 10.85                                      | 5.79                | 20.4       | 329  | 0.7  | 3.7              | 37       |        |      |
| 0827  | 0.51  | 3.23  | 0.17                                      | 10.86                                      | 5.78                | 20.3       | 327  | 0.7  | 4.0              | 40       | 56T    |      |
|   |   |   |   |  |                     |            |  |  |                  |          | Yellow |      |
|   |   |   |   |  |                     |            |  |  |                  |          | Treat  |      |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88<br>TUBING INSIDE DIA. CAPACITY (Gal/ft): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016 |   |   |   |  |                     |            |  |  |                  |          |        |      |
| PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)   |   |   |   |  |                     |            |  |  |                  |          |        |      |

**SAMPLING DATA**

|   |              |               |        |  |                               |                              |  |                                    |  |                                       |  |                         |  |
|---|--------------|---------------|--------|--|-------------------------------|------------------------------|--|------------------------------------|--|---------------------------------------|--|-------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DANNY ARMOUR I. ALL</b>  |              |               |        | SAMPLER(S) SIGNATURE(S):  |                               |                              |  | SAMPLING INITIATED AT: <b>0828</b> |  | SAMPLING ENDED AT: <b>NR</b>          |  |                         |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b>   |              |               |        | TUBING MATERIAL CODE: <b>T</b>   |                               | FIELD-FILTERED: <b>Y (N)</b> |  | FILTER SIZE: _____                 |  |                                       |  |                         |  |
| FIELD DECONTAMINATION: PUMP <b>Y (N)</b>  |              |               |        | TUBING <b>Y (N) (replaced)</b>   |                               | DUPLICATE: <b>Y (N)</b>      |  |                                    |  |                                       |  |                         |  |
| SAMPLE CONTAINER SPECIFICATION  |              |               |        | SAMPLE PRESERVATION  |                               |                              |  | INTENDED ANALYSIS AND/OR METHOD    |  | SAMPLE PUMP FLOW RATE (mL per minute) |  | SAMPLING EQUIPMENT CODE |  |
| SAMPLE ID CODE  | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED  | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH                     |  |                                    |  |                                       |  |                         |  |
|   |              |               |        |  |                               |                              |  |                                    |  |                                       |  |                         |  |
| REMARKS: <b>SHEEN! NO</b>   |              |               |        |  |                               |                              |  |                                    |  |                                       |  |                         |  |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  |              |               |        |  |                               |                              |  |                                    |  |                                       |  |                         |  |
| SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |              |               |        |  |                               |                              |  |                                    |  |                                       |  |                         |  |

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE SITE LOCATION: JACKSONVILLE, FL  
 WELL NO: MWB-395 SAMPLE ID: \_\_\_\_\_ DATE: 3-24-22

**PURGING DATA**

WELL DIAMETER (Inches): 2 TUBING DIAMETER (Inches): 1.4 WELL SCREEN INTERVAL DEPTH: 8.9 feet to 18.9 feet STATIC DEPTH TO WATER (feet): 13.34 PURGE PUMP TYPE OR BAILER: PP  
 WELL ELEVATION TOC (ft NGVD): 126.85 GROUNDWATER ELEVATION (ft NGVD): 113.51  
 WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable)  
 \* 18.90 feet - 13.34 feet X 0.163 gallons/foot = 0.91 gallons  
 EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)  
 \* 0.0 gallons + 0.0026 gallons/foot X 18.90 feet + 0.05 gallons = 0.10 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 PURGING INITIATED AT: 0842 PURGING ENDED AT: 0902 TOTAL VOLUME PURGED (gallons): 2.21

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOUR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---|---|------------------|----------|-------|-------|
| 0852 | 1.14                    | 1.14                           | 0.11             | 13.54                 | 5.41                | 19.6       | 649                                       | 0.4   | 2.5              | 15       |       |       |
| 0855 | 0.33                    | 1.47                           | 0.11             | 13.54                 | 5.41                | 19.6       | 650                                       | 0.4   | 2.7              | 14       |       |       |
| 0858 | 0.33                    | 1.79                           | 0.11             | 13.55                 | 5.41                | 19.6       | 655                                       | 0.4   | 2.2              | 14       |       |       |
| 0901 | 0.33                    | 2.10                           | 0.11             | 13.55                 | 5.41                | 19.6       | 657                                       | 0.4   | 1.9              | 14       |       | None  |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal/FL): 1/8" = 0.0009; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.018  
 PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

AMPLED BY (PRINT) / AFFILIATION: DAVID ARMOUR / AUC SAMPLER(S) SIGNATURE(S): \_\_\_\_\_  
 JMP OR TUBING DEPTH IN WELL (feet): 18.00 TUBING MATERIAL CODE: PE FIELD-FILTERED: Y  FILTER SIZE: \_\_\_\_\_  
 FLD DECONTAMINATION: PUMP Y  TUBING Y  (replaced) DUPLICATE: Y

| SAMPLE CONTAINER SPECIFICATION |              |               |                         | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|--------------|---------------|-------------------------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| WPLE CODE                      | # CONTAINERS | MATERIAL CODE | VOLUME                  | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
|                                | <u>2</u>     |               | <u>SEE SAMPLE C-0-C</u> |                     |                               |          |                                 |                                       |                         |

REMARKS:  
 Sheen Present: YES  NO   
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION J)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB-11I(R)**      SAMPLE ID: \_\_\_\_\_

WELL DATE: **3-24-22**

**PURGING DATA**  
 WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **3/8**      WELL SCREEN INTERVAL DEPTH: **45** (feet to **55** feet)      STATIC DEPTH TO WATER (feet): **14.88**      PURGE PUMP TYPE OR BAILER: **BP**  
 WELL ELEVATION TOC (ft NGVD): **120.43**      GROUNDWATER ELEVATION (ft NGVD): **105.55**  
 WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable) = ( \_\_\_\_\_ feet - \_\_\_\_\_ feet ) X \_\_\_\_\_ gallons/foot = \_\_\_\_\_ gallons  
 EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable) = **0.3** gallons + (**0.006** gallons/foot X **55.00** feet) + **0.05** gallons = **0.68** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **50.00**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **50.00**      PURGING INITIATED AT: **0703**      PURGING ENDED AT: **0723**      TOTAL VOLUME PURGED (gallons): **1.60**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (micro units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--|--|------------------|----------|-------|------|
| 0713 | 2.30                    | 2.30                           | 0.23             | 14.99                 | 4.53                | 24.5       | 39                                       | 0.2  | 1.92             | 73       |       |      |
| 0716 | 0.69                    | 2.99                           | 0.23             | 14.99                 | 4.52                | 24.6       | 38                                       | 0.2  | 2.13             | 74       |       |      |
| 0719 | 0.69                    | 3.68                           | 0.23             | 14.99                 | 4.51                | 24.6       | 38                                       | 0.2  | 2.06             | 74       |       |      |
| 0722 | 0.69                    | 4.37                           | 0.23             | 14.99                 | 4.52                | 24.6       | 38                                       | 0.2  | 2.15             | 74       | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal/FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: **Danny Armour / AUC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_      SAMPLING INITIATED AT: **0723**      SAMPLING ENDED AT: **NR**  
 PUMP OR TUBING DEPTH IN WELL (feet): **50.00**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y** (N)      FILTER SIZE: \_\_\_\_\_  
 FIELD DECONTAMINATION: PUMP **Y** (N)      TUBING **Y** (N) (replaced)      DUPLICATE: **Y** (N)  
 SAMPLE CONTAINER SPECIFICATION      SAMPLE PRESERVATION      INTENDED ANALYSIS AND/OR METHOD      SAMPLE PUMP FLOW RATE (mL per minute)      SAMPLING EQUIPMENT CODE

| SAMPLE CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|-------------|--------------|---------------|--------|-------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| (X)         | SEE          | SAMPLE        | 600    |                   |                               |          |                                 |                                       |                         |

REMARKS: **Shoen Present YES (NO)**  
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

# GROUNDWATER SAMPLING LOG

SITE NAME: **TRAIL RIDGE**      SITE LOCATION: **JACKSONVILLE, FL**  
 WELL NO: **MWB-135**      SAMPLE ID: \_\_\_\_\_      DATE: **3-24-22**

**PURGING DATA**

WELL DIAMETER (Inches): **2**      TUBING DIAMETER (Inches): **3/8**      WELL SCREEN INTERVAL DEPTH: **10.5** feet to **26.56** feet      STATIC DEPTH TO WATER (feet): **12.44**      PURGE PUMP TYPE OR BAILER: **BP**

WELL ELEVATION TOC (ft NGVD): **126.06**      GROUNDWATER ELEVATION (ft NGVD): **113.62**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 = ( \_\_\_\_\_ feet - \_\_\_\_\_ feet ) X \_\_\_\_\_ gallons/foot = \_\_\_\_\_ gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 = **0.3** gallons + ( **0.006** gallons/foot X **26.56** feet ) + **0.05** gallons = **0.51** gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **21.56**      FINAL PUMP OR TUBING DEPTH IN WELL (feet): **21.56**      PURGING INITIATED AT: **0735**      PURGING ENDED AT: **0755**      TOTAL VOLUME PURGED (gallons): **3.60**

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOUR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|--|------------------|----------|-------|-------|
| 0745 | 1.80                    | 1.80                           | 0.18             | 14.02                 | 5.98                | 20.9       | 466                            | 2.4  | 5.2              | 110      |       |       |
| 0748 | 0.54                    | 2.34                           | 0.18             | 14.03                 | 6.00                | 20.7       | 476                            | 2.4  | 4.9              | 110      |       |       |
| 0751 | 0.54                    | 2.88                           | 0.18             | 14.03                 | 6.01                | 20.6       | 477                            | 2.4  | 4.5              | 111      |       |       |
| 0754 | 0.54                    | 3.42                           | 0.18             | 14.03                 | 6.02                | 20.6       | 478                            | 2.5  | 4.3              | 111      | NONE  |       |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./FT): 1/8" = 0.0009; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: **DAVID ARMOUR / ACC**      SAMPLER(S) SIGNATURE(S): \_\_\_\_\_      SAMPLING INITIATED AT: **0755**      SAMPLING ENDED AT: **NR**

JMP OR TUBING DEPTH IN WELL (feet): **21.56**      TUBING MATERIAL CODE: **T**      FIELD-FILTERED: **Y** (N)      FILTER SIZE: \_\_\_\_\_ µm

FIELD DECONTAMINATION: PUMP **Y** (N)      TUBING **Y** (Replaced)      DUPLICATE: **Y** (N)

| SAMPLE CONTAINER SPECIFICATION |              |               |              | SAMPLE PRESERVATION |                               |          | INTENDED ANALYSIS AND/OR METHOD | SAMPLE PUMP FLOW RATE (mL per minute) | SAMPLING EQUIPMENT CODE |
|--------------------------------|--------------|---------------|--------------|---------------------|-------------------------------|----------|---------------------------------|---------------------------------------|-------------------------|
| AMPLE CODE                     | # CONTAINERS | MATERIAL CODE | VOLUME       | PRESERVATIVE USED   | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |                                 |                                       |                         |
| (X)                            | 1            | SEE           | SAMPLE C-0-C |                     |                               |          |                                 |                                       |                         |

REMARKS: **Shoen Present YES (NO)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units      Temperature: ± 0.2 °C      Specific Conductance: ± 5%      Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater)      Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

APPENDIX B  
COMPACT DISK CONTAINING  
REPORT IN .PDF FORMAT  
AND  
ADaPT FILE